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RESERVES OF CRUDE OIL, GAS, NATURAL GAS LIQUIDS AND SULPHUR PROVINCE OF ALBERTA

DECEMBER 31, 1965

DONATED JAN 9 1975

OIL AND GAS CONSERVATION BOARD
603 SIXTH AVENUE SOUTH WEST • CALGARY, ALBERTA

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DECEMBER 31, 1965

OIL AND GAS CONSERVATION BOARD
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PRICE $2.00

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I THE PROVED RECOVERABLE RESERVES OF CRUDE OIL IN THE PROVINCE OF ALBERTA

The Board estimates the remaining proved recoverable reserves of crude oil in Alberta as of December 31, 1965 to be some 6.08 billion stock tank barrels. The present estimate represents an increase of some 430 million stock tank barrels since December 31, 1964. A comparison of the 1964 and 1965 estimates is given below:

	Billions of Stock Tank Barrels
Remaining proved recoverable crude oil reserves at December 31, 1964	5.83
Additions to reserves during 1965	0.43
Crude oil produced during 1965	0.18
Remaining proved recoverable crude oil reserves at December 31, 1965	6.08

The addition to crude oil reserves during the year comprises some 180 million barrels attributed to new pools discovered during 1965 and about 250 million barrels attributed to development, re-evaluation or the introduction of enhanced recovery schemes in previously discovered pools. Although the reserves presently assigned to the 1965 discoveries are not large, the Board believes that the discoveries in the Rainbow Area have started a play that in all probability will contribute substantially to proved reserves in the near future.

The most significant changes in the 1965 estimates of remaining crude oil reserves occurred in the pools listed in the following table.

Pool	Board's Estimate as of Dec. 31, 1964 MMSTB	Dec. 31, 1965 MMSTB	Change MMSTB	Remarks
Fenn-Big Valley D-2 A	193.0	239.0	+46.0	Re-evaluation of natural water drive efficiency
Garrington Cardium A and B	11.6	23.4	+11.8	Water flood enhanced recovery
Golden Spike D-3 A	232.0	279.0	+47.0	Solvent flood enhanced recovery
Leduc-Woodbend D-3 A	192.0	207.0	+15.0	Re-evaluation of assisted natural water drive efficiency
Mitsue Gilwood A	57.6	134.0	+76.4	Development
Nipisi Gilwood A	-	85.2	+85.2	New discovery in 1965
Pembina Keystone Belly River B	13.2	24.8	+11.6	Development
Pembina Cardium	1,790.0	1,690.0	-100.0	Mainly reduction in recovery from water flood areas and from peripheral primary reserve areas.
Snipe Lake Beaverhill Lake	23.7	77.0	+53.3	Development and water flood enhanced recovery
Wizard Lake D-3 A	220.0	243.0	+23.0	Re-evaluation of natural water drive efficiency
Undefined Pools and Areas				
Light and Medium	35.6	73.0	+37.4	New discoveries in 1965
Heavy	4.1	7.0	+2.9	

The term "crude oil" used in this report has its ordinary meaning and excludes condensate and natural gas liquids.

The estimates for crude oil refer solely to proved reserves recoverable under existing economic and operating conditions. The proved reserves in any pool consist of

(1) the crude oil estimated to be recoverable by the production systems now in operation and from the area actually drilled on the spacing pattern in effect in the pool, as well as

(2) the crude oil under undrilled spacing units which are so close and so related to drilled spacing units that there is every reasonable probability that this crude oil will be produced when the spacing units are drilled, or will be recovered from existing wells.

The reserves attributed to areas subject to enhanced recovery operations comprise only those reserves which the performance of the schemes to date indicates are reasonably certain to be recovered. The estimates do not include crude oil obtainable from oil sands, oil shale, coal, or like sources.

The crude oil reserves have been established having regard to

(1) submissions made to the Board by industry in connection with the crude oil reserves hearings held in February, 1965 and in February, 1966,

(2) data presented at hearings in previous years respecting maximum permissive rates (MPR's) of production,

(3) submissions made to the Board respecting well spacing and enhanced recovery schemes, and

(4) independent studies by the Board staff.

For the purpose of this report, the Board has reviewed the reserves of pools for which no submissions were made at the February, 1966 reserves hearing and has amended the estimates where revisions appeared warranted. The December 31, 1965 reserves established following the February, 1966 hearing and published in the Board's letter dated April 25, 1966 to all operators outlining "proration data for crude oil pools" are the same as set out in this report.

Details of the Board's estimate of the proved recoverable reserves of crude oil in the Province are set out in Table I-1. The table is subdivided into "light and medium crude oil pools" and "heavy crude oil pools". The "light and medium" category is further subdivided into "prorated" pools and "good production practice"[1] pools. Similarly, the "heavy" category is subdivided into "pools subject to maximum rate limitations" and "good production practice" pools. Within each subdivision of the table, the pools are listed alphabetically.

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[1] Good production practice - a classification utilized for pools in advanced stages of depletion or which otherwise would be subject to severe gas or water penalties. This classification is normally assigned to permit improving the economics of production and thus defer the date of abandonment.

In general, heavy crude oil is defined as that having a gravity of 25° API or less. The Board has made exceptions to this criterion where appropriate, having regard for market utilization of the crude oil and purchasers' categorization.

Certain of the pools in Table I-1 have been allocated proved reserves attributable to enhanced recovery schemes now in operation. For each of these pools, Table I-2 shows a comparison of the recoverable reserves and recovery factors before and after assignment of additional reserves attributable to enhanced recovery, for that part of the pool to which additional reserves have been attributed.

The location of the principal pools listed in the table is shown in Figure I-1.

TABLE I-1

PROVED RESERVES OF CRUDE OIL IN THE PROVINCE OF ALBERTA, DECEMBER 31, 1965

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
LIGHT AND MEDIUM CRUDE OIL						
PRORATED POOLS						
Acheson Blairmore A	8,500	0.035	298	221	77	
Acheson Blairmore B	2,000	0.013	26	26	0	Suspended April 1960
Acheson Blairmore C	1,500	0.200	300	274	26	
Acheson Blairmore D	2,600	0.100	260	55	205	
Acheson Blairmore F	1,000	0.100	100	49	51	
Acheson Blairmore G	610	0.100	61	27	34	
Acheson Blairmore H	2,580	0.070	180	152	28	Formerly Other Blairmore
Acheson D-2 A	3,600	0.500	1,800	1,615	185	Formerly North D-2
Acheson D-2 B	316	0.400	126	94	32	Formerly Other D-2
Acheson D-3 A	149,000	0.700	104,000 (1)	30,393	73,607	Formerly D-3
Acheson East Blairmore A	2,880	0.180	518	462	56	
Acheson East Blairmore B	6,000	0.080	480	366	114	
Aerial Mannville	5,080	0.130	660	454	206	
Alix D-2	6,570	0.250	1,640	699	941	
Alliance Blairmore	5,500	0.020	110	97	13	
Ante Creek Beaverhill Lake	32,100	0.100	3,210	775	2,435	
Ante Creek Gilwood A	290	< 0.010	1	1	0	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Armisie Blairmore	5,900	0.090	531	478	53	
Barons Colorado	1,690	0.300	507	428	79	
Bashaw Ireton A	3,000	0.100	300	40	260	
Bashaw D-2 A	6,240	0.020	125	56	69	
Bashaw D-3 A	11,300	0.150	1,700	816	884	
Battle Viking	2,670	0.320	855	808	47	
Battle North Viking	1,520	0.280	426	302	124	
Battle South Viking	3,230	0.310	1,000	943	57	
Bellshill Lake Blairmore	206,000	0.120	25,000	7,589	17,411	
Bigoray Ostracod	15,800	0.120	1,900 (2)	935	965	
Bonnie Glen Cardium A	6,500	0.140	910	663	247	
Bonnie Glen D2 A	871	0.080	70	60	10	
Bonnie Glen D3 A	600,000	0.650	390,000	89,809	300,191	
Boundary Lake South Triassic A	761	0.100	76	25	51	
Buffalo Lake D-3	8,880	0.550	4,880	915	3,965	
Campbell Blairmore A	18,000	0.060	1,080	845	235	
Campbell Blairmore B	420	0.100	42	39	3	
Namao Blairmore C	933	0.150	140	121	19	
Namao Blairmore D	555	0.150	83	57	26	
Namao Blairmore E	15,500	0.060	930	665	265	Formerly Namao Blairmore A
Caroline Cardium A	1,200	0.050	60	14	46	
Caroline Viking A	4,500	0.100	450	63	387	
Caroline Viking B	730	0.100	73	54	19	
Caroline Viking C	411	0.150	62	27	35	
Carrot Creek Cardium A	9,350	0.100	935	95	840	
Carson Creek North Beaverhill Lake A - Total	66,000		29,200 (1)	2,599	26,601	

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
Carson Creek North Beaverhill Lake A - Natural Depletion	1,780	0.150	267			
Waterflood	64,200	0.450	28,900			
Carson Creek North Beaverhill Lake B - Total	215,000		84,000 (1)	5,126	78,874	
Natural Depletion	9,380	0.160	1,500			
Waterflood	206,000	0.400	82,500			
Carstairs Elkton B	991	0.100	99	9	90	
Chamberlain Blairmore	2,600	0.060	156	133	23	
Chigwell Viking A	1,110	0.050	56	14	42	
Chigwell Viking B	1,500	0.050	75	30	45	
Chigwell D-2 A	800	0.200	160	109	51	
Chigwell D-2 B	730	0.060	44	40	4	
Chigwell D-3 A	393	0.000	0	0	0	Suspended August 1964
Choice Blairmore	8,500	0.040	340	228	112	
Clive D-2 A	12,200	0.150	1,830	493	1,337	
Clive D-2 C	219	0.100	22	7	15	
Clive D-3 A	20,800	0.400	8,320	2,566	5,754	
Countess Basal Quartz D	783	< 0.010	1	0	1	Suspended June 1961
Crossfield Cardium A	160,000	0.100	16,000 (2)	9,010	6,990	
Crossfield Cardium B	747	0.100	75	37	38	
Crossfield Jumping Pound A	550	0.100	55	26	29	
Crossfield Elkton A	2,510	0.050	126	23	103	
Cyn-Pem Cardium	50,000	0.120	6,000	799	5,201	
Drumheller D-2 A	8,160	0.650	5,300	2,916	2,384	
Drumheller D-2 B	9,620	0.450	4,330	413	3,917	
Duhamel D-2 A	12,300	0.450	5,540	3,130	2,410	Formerly D-2
Duhamel D-3 A	1,200	0.100	120	106	14	Formerly South D-3
Duhamel D-3 B	14,100	0.500	7,050	3,208	3,842	Formerly North D-3
Eaglesham D-3 A	3,470	0.450	1,560	516	1,044	

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
EDSON CARDIUM A	533	0.120	64	40	24	
EDSON CARDIUM B	23,600	0.120	2,830 (2)	501	2,329	
ELLERSLIE BLAIRMORE A	500	0.100	50	17	33	
ELLERSLIE BLAIRMORE B	1,170	0.350	410	362	48	
ERSKINE D-2	2,870	0.150	430	141	289	
ERSKINE D-3	38,600	0.500	19,300	11,734	7,566	
ETHEL BEAVERHILL LAKE A	16,200	0.100	1,620	12	1,608	
EWING LAKE D-2 A	950	0.200	190	175	15	
EWING LAKE D-2 B	3,140	0.350	1,100	218	882	
EWING LAKE D-2 C	2,820	0.200	564	279	285	
EWING LAKE D-3 A	3,250	0.400	1,300	697	603	
EXCELSIOR MANNVILLE A	4,400	<0.010	4	4	0	
EXCELSIOR D-2	30,800	0.650	20,000	11,348	8,652	
FAIRYDELL-BON ACCORD D-2 A	6,500	0.120	782	782	0	FORMERLY BON ACCORD D-2
FAIRYDELL-BON ACCORD D-2 B	4,210	0.380	1,600	753	847	FORMERLY FAIRYDELL D-2
FAIRYDELL-BON ACCORD D-3 A	17,400	0.550	9,570	3,791	5,779	FORMERLY FAIRYDELL D-3
FENN BIG VALLEY D-2 A	357,000	0.670	239,000	74,101	164,899	FORMERLY FENN BIG VALLEY D-2
BIG VALLEY D-3 A	3,390	0.470	1,590	1,433	157	
BIG VALLEY D-3 B	1,640	0.450	738	165	573	FORMERLY BIG VALLEY NORTH D-3
FENN D-3 C	690	0.200	138	3	135	FORMERLY FENN SOUTH B D-3
FENN D-3 E	1,450	0.110	160	127	33	FORMERLY FENN D-3
FENN D-3 F	14,900	0.600	8,940	3,693	5,247	FORMERLY FENN NORTH D-3
FENN WEST D-2 A	16,000	0.400	6,400	1,485	4,915	
FERRIER CARDIUM A	1,530	<0.010	1	1	0	
FERRIER CARDIUM B	3,780	0.050	189	63	126	

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
Ferrier Cardium C	1,100	0.050	55	12	43	
Ferrier Viking A	20,000	0.100	2,000	843	1,157	
Freeman Beaverhill Lake A	33,300	0.150	5,000	374	4,626	
Garrington Cardium A & B Total	163,000		23,400 (1)	6,829	16,571	
Natural Depletion	15,000	0.080	1,200			
Waterflood	148,000	0.150	22,200			
Gilby Belly River A	1,800	0.100	180	45	135	
Gilby Belly River B	1,940	0.100	194	11	183	
Gilby Viking A Total	38,400		17,200 (1)	10,024	7,176	
Natural Depletion	585	0.200	117			
Waterflood	37,900	0.450	17,100			
Gilby Viking B	6,400	0.200	1,280	609	671	
Gilby Basal Mannville B	51,100	0.050	2,560	705	1,855	
Gilby Jurassic B	80,000	0.120	9,600	2,117	7,483	
Gilby Jurassic F	10,500	0.150	1,580	210	1,370	
Gilby Rundle B	1,100	0.020	22	13	9	
Gilby Rundle E	880	0.100	88	48	40	
Gilby Rundle F	2,810	0.100	281	1	280	
Giroux Lake Viking A	3,780	0.150	567	62	505	
Glen Park Glauconitic A	1,220	0.180	220	208	12	
Glen Park Glauconitic B	587	0.100	59	9	50	
Glen Park D-2 A	1,910	0.100	191	123	68	
Glen Park D-3 A	25,800	0.670	17,300	4,434	12,866	
Golden Spike D-2 A	11,700	0.250	2,930	1,005	1,925	Formerly South D-2 A
Golden Spike D-2 B	1,920	0.120	230	199	31	Formerly North D-2 A
Golden Spike D-3 A	310,000	0.900	279,000 (1)	36,098	242,902	Formerly South D-3 A

(1)	(2)	(3)	(4)	(5)	(6)	(7)
POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Golden Spike D-3 B	3,980	0.300	1,190	552	638	Formerly South D-3 B
Golden Spike D-3 C	2,110	0.300	633	561	72	Formerly North D-3 A
Goose River Beaverhill Lake A	145,000	0.160	23,200	1,021	22,179	
Hamilton Viking A	23,800	0.160	3,800 (2)	2,242	1,558	
Hamilton Viking B	8,000	0.050	400	29	371	
Harmattan East Blairmore	1,800	0.100	180	94	86	
Harmattan East Rundle	179,000	0.350	62,600	14,323	48,277	
Harmattan-Elkton Rundle B	712	0.100	71	19	52	
Harmattan-Elkton Rundle C	188,000	0.310	58,300	17,277	41,023	Formerly Main Rundle
Hussar Glauconitic A	835	0.030	25	24	1	
Hussar Glauconitic B	425	<0.010	1	1	0	
Hussar Glauconitic C	260	0.050	13	13	0	Suspended January 1963
Hussar Glauconitic E	1,100	0.050	55	44	11	
Hussar Glauconitic F	467	0.060	28	25	3	
Hussar Glauconitic G	679	0.150	102	55	47	
Hussar Ostracod A	43,900	0.400	17,600	3,531	14,069	
Hussar Ostracod C	500	0.020	10	10	0	Abandoned 1961
Hussar Ostracod H	300	0.010	3	3	0	Abandoned April 1963
Hussar Ostracod O	389	0.100	39	11	28	
Hussar Ostracod P	786	0.100	79	9	70	
Hussar Basal Mannville A	605	0.038	23	23	0	Abandoned July 1963
Hussar Basal Mannville C	630	0.100	63	55	8	
Hussar Basal Mannville E	1,350	0.013	18	18	0	Suspended January 1963
Hussar Basal Mannville G	1,400	<0.010	2	2	0	Suspended March 1962
Hussar Basal Mannville H	1,800	<0.010	1	1	0	Abandoned December 1961
Hussar Basal Mannville I	990	0.100	99	61	38	

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
Hussar Basal Mannville L	224	0.058	13	13	0	Suspended September 1963
Hussar Basal Mannville M	1,680	0.100	168	21	147	
Hussar Basal Mannville N	973	0.100	97	18	79	
Hussar Basal Mannville O	9,780	0.100	978	70	908	
Hussar Basal Mannville P	1,560	0.100	156	17	139	
Hutton Viking	8,810	0.420	3,700	605	3,095	
Innisfail Blairmore	522	0.059	31	31	0	Suspended June 1960
Innisfail D-3	120,000	0.550	66,000	18,493	47,507	
Joarcam Viking	150,000	0.370	55,000 (2)	51,483	3,517	
Joffre Viking	80,100	0.410	32,800 (1)	31,424	1,376	
Joffre Blairmore A	1,210	0.050	60	30	30	
Joffre Blairmore B	1,100	0.100	110	76	34	
Joffre D-2	140,000	0.140	19,600	14,963	4,637	
Joffre South Viking	1,250	0.290	362	339	23	
Judy Creek Beaverhill Lake A	809,000	0.450	364,000 (1)	25,871	338,129	
Judy Creek Beaverhill Lake B	256,000	0.480	123,000 (1)	7,264	115,736	Formerly West Beaverhill Lake
Judy Creek South Beaverhill Lake	15,000	0.200	3,000 (1)	380	2,620	
Kaybob Cadomin B	18,700	0.050	935	168	767	
Kaybob Beaverhill Lake A	300,000	0.400	120,000 (1)	16,700	103,300	
Kaybob Beaverhill Lake B	1,310	0.160	210	55	155	
Kaybob South Triassic A	131,000	0.150	19,600	3,451	16,149	
Kessler Viking	1,010	0.100	101	88	13	
Knappen Lower Mannville A	667	0.100	67	7	60	
Lanaway Cardium	12,000	0.060	720	322	398	
Lanaway Mannville	3,200	0.050	160	86	74	
Lanaway D-3 A	1,540	0.010	15	5	10	
Leafland Cardium A	62,900	0.080	5,030 (2)	1,830	3,200	
Leafland Glauconitic A	9,620	0.100	962	108	854	

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
Leafland Viking A	2,610	0.150	392	245	147	
Leafland North Cardium A	32,600	0.090	2,940	126	2,814	
Leduc-Woodbend Blairmore A	7,500	0.170	1,270	1,093	177	Formerly North Woodbend Blairmore A
Leduc-Woodbend Blairmore B	172	0.070	12	12	0	Formerly North Woodbend Blairmore B Abandoned May 1962
Leduc-Woodbend Blairmore C	400	< 0.010	1	1	0	Abandoned August 1956
Leduc-Woodbend Blairmore D	3,000	0.020	60	60	0	Abandoned November 1962
Leduc-Woodbend Blairmore E	3,800	0.030	114	91	23	
Leduc-Woodbend Blairmore F	4,200	< 0.010	21	21	0	Abandoned November 1963
Leduc-Woodbend Blairmore G	800	< 0.010	4	4	0	Abandoned November 1954
Leduc-Woodbend Blairmore H	240	< 0.0125	3	3	0	Abandoned May 1951
Leduc-Woodbend Blairmore J	5,850	0.400	2,340	2,061	279	Formerly Gilbert Blairmore
Leduc-Woodbend Blairmore K	1,920	0.120	230	220	10	Formerly West Devon Blairmore
Leduc-Woodbend D-1 A	1,000	0.020	20	7	13	
Leduc-Woodbend D-1 B	250	0.200	50	22	28	
Leduc-Woodbend D-2 A	205,000	0.450	92,300 (1)	72,939	19,361	
Leduc-Woodbend D-2 B	73,200	0.280	20,500 (2)	19,889	611	
Leduc-Woodbend D-2 C	2,600	0.500	1,300	1,292	8	
Leduc-Woodbend D-2 D	410	0.550	226	207	19	
Leduc-Woodbend D-2 E	1,100	0.550	605	577	28	
Leduc-Woodbend D-2 F	2,500	0.200	500	80	420	
Leduc-Woodbend D-3 A	295,000	0.700	207,000 (1)	156,570	50,430	
Leduc-Woodbend D-3 B	14,800	0.450	6,650	6,213	437	
Leduc-Woodbend D-3 C	837	0.540	452	446	6	
Leduc-Woodbend D-3 D	714	0.400	286	279	7	Suspended November 1962

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
Legal Viking	2,000	0.400	800	655	145	
Legal Mannville B	240	0.025	6	6	0	
Little Smoky D-3	2,500	0.400	1,000	693	307	
Lochend Cardium A	4,190	0.100	419	104	315	
Lousana D-2	2,610	0.330	860	193	667	
Malmo Blairmore	5,000	0.200	1,000	779	221	
Malmo D-2	16,200	0.430	6,970	4,623	2,347	
Malmo D-3	9,530	0.500	4,760	2,458	2,302	
Medicine River Cardium A	520	< 0.010	1	1	0	Suspended September 1964
Medicine River Viking A	400	0.060	24	17	7	
Medicine River Glauconitic A	3,200	0.100	320	82	238	
Medicine River Glauconitic B	917	0.100	92	22	70	
Medicine River Glauconitic C	4,390	0.100	439	54	385	
Medicine River Glauconitic D	2,490	0.100	249	20	229	
Medicine River Ostracod A	6,700	0.100	670	143	527	
Medicine River Ostracod B	685	0.150	103	46	57	
Medicine River Ostracod C	2,040	0.010	20	12	8	
Medicine River Ostracod G	917	0.100	92	12	80	
Medicine River Basal Quartz B	36,200	0.100	3,620	544	3,076	
Medicine River Basal Quartz C	412	< 0.010	3	3	0	Abandoned August 1963
Medicine River Basal Quartz D	2,470	0.050	123	37	86	
Medicine River Basal Quartz F	871	< 0.010	4	4	0	Suspended January 1965
Medicine River Basal Quartz G	8,020	0.050	401	64	337	
Medicine River Basal Quartz H	1,000	0.100	100	22	78	
Medicine River Basal Quartz I	1,650	0.050	83	29	54	
Medicine River Jurassic A	31,700	0.160	5,070	1,948	3,122	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Medicine River Jurassic B	7,300	0.120	875	130	745	
Medicine River Jurassic C	52,900	0.120	6,350	732	5,618	
Medicine River Jurassic D	53,200	0.150	7,980	623	7,357	
Medicine River Jurassic E	895	<0.010	1	1	0	Suspended October 1962
Medicine River Elkton A	2,000	0.030	60	43	17	
Medicine River Pekisko B	5,470	0.150	820	207	613	
Medicine River Pekisko C	20,900	0.020	418	171	247	
Medicine River Pekisko D	200	0.060	12	10	2	
Medicine River Pekisko E	14,900	0.100	1,490	139	1,351	
Medicine River Pekisko F	3,260	<0.010	10	6	4	
Medicine River Pekisko G	1,160	<0.010	1	1	0	Suspended August 1965
Medicine River Pekisko H	1,500	0.020	30	8	22	
Medicine River Pekisko I	32,700	0.150	4,900	720	4,180	
Medicine River Pekisko J	1,000	0.020	20	4	16	
Minnehik-Buck Lake Cardium A	610	0.050	31	17	14	
Mitsue Gilwood A	671,000	0.200	134,000	2,293	131,707	
Morinville D-1 A	352	0.128	45	45	0	Abandoned October 1960
Morinville D-3 A	570	0.300	171	139	32	
Morinville D-3 B	16,700	0.450	7,500	137	7,363	
Morinville D-3 C	1,380	0.300	414	54	360	
Morinville Lower Mannville A	1,250	0.020	25	10	15	
Morinville Lower Mannville F	310	0.100	31	11	20	
Morinville Lower Mannville L	813	0.050	41	4	37	
Nevis D-2	2,700	0.033	89	89	0	Suspended May 1962
New Norway D-2	12,000	0.600	7,200	3,096	4,104	
New Norway D-3	2,000	0.500	1,000	864	136	

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New Norway Blairmore	435	<0.010	1	1	0	Abandoned June 1956
Nipisi Gilwood A	426,000	0.200	85,200	321	84,879	
Normandville D-1 A	3,330	0.150	500	377	123	
Normandville D-3 A	2,590	0.500	1,300	548	752	
Normandville D-3 B	3,540	0.430	1,520	620	900	
Normandville Jurassic A	754	0.011	8	8	0	Abandoned 1961
Normandville Mississippian B	147	0.040	6	6	0	Abandoned November 1961
Olds Wabamun A	23,800	0.150	3,580	29	3,551	
Peavey Viking	2,950	0.070	200	137	63	
Peavey Blairmore	3,640	0.130	470 (2)	441	29	
Pembina Keystone Belly River B	165,000	0.150	24,800	1,702	23,098	
Pembina Keystone Belly River C	48,800	0.150	7,320	935	6,385	
Pembina Belly River G	1,360	0.110	150	130	20	
Pembina Belly River H	5,810	0.050	291	136	155	
Pembina Belly River I	40,100	0.150	6,000	1,909	4,091	
Pembina Belly River J	10,200	0.170	1,730	259	1,471	
Pembina Keystone Belly River K	865	0.150	130	45	85	
Pembina Keystone Belly River L	19,300	0.150	2,900	429	2,471	
Pembina Keystone Belly River M	39,100	0.120	4,700	665	4,035	
Pembina Keystone Belly River O	1,850	0.100	185	22	163	
Pembina Keystone Belly River P	842	<0.010	0	0	0	
Pembina Belly River Q	1,020	0.060	61	50	11	
Pembina Keystone Belly River R	3,200	<0.010	0	0	0	
Pembina Keystone Belly River U	8,700	0.150	1,300	179	1,121	
Pembina Keystone Belly River W	1,370	0.050	68	3	65	
Pembina Keystone Belly River X	11,600	0.150	1,740	35	1,705	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Pembina Cardium Total	7,650,000		1,690,000 (1)	391,526	1,298,474	
Primary Drilled	1,750,000	0.101	177,000 (3)			
Primary Undrilled	267,000	0.030	8,000			
Gas Flood	79,600	0.151	12,000			
Partial Gas Flood	512,000	0.120	61,400			
Water Flood	4,620,000	0.273	1,260,000			
Solvent Flood	423,000	0.400	169,000			
Pembina Keystone Blairmore A	3,850	0.050	192	148	44	
Pembina Pekisko A	742	0.150	111	71	40	
Provost Viking A & B	1,710	0.112	191	134	57	
Red Coulee Moulton B	4,080	0.100	408	22	386	
Red Earth Granite Wash A	57,600	0.200	11,500	310	11,190	
Red Earth Granite Wash C	15,500	0.200	3,090	191	2,899	
Redwater D-3	1,300,000	0.600	780,000	308,755	471,245	
Retlaw Mannville A	396	<0.010	2	2	0	Suspended October 1960
Retlaw Mannville B	621	0.011	7	7	0	Suspended October 1960
Rocky Mountain House Cardium	7,860	0.080	630	530	100	
Rosebud Blairmore	2,400	0.130	312	235	77	
Rowley Pekisko A	19,700	0.030	591	254	337	
Samson Blairmore A	6,500	0.020	130	105	25	Formerly Blairmore West
Seiu Lake Lower Mannville C	369	0.100	37	30	7	
Simonette D-3	87,000	0.550	47,800	4,617	43,183	
Skarq Cooking Lake	710	0.100	71	61	10	
Snipe Lake Beaverhill Lake						
Total	198,000		77,000 (1)	5,026	71,974	
Natural Depletion	8,000	0.120	960			
Water Flood	190,000	0.400	76,000			

(1)	(2)	(3)	(4)	(5)	(6)	(7)
POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Spring Coulee Rundle	2,600	0.027	70	66	4	
Big Lake D-1 A	1,600	0.200	320	222	98	
St. Albert D-1 B	320	0.150	48	38	10	
Big Lake D-2 A	2,500	0.400	1,000	606	394	
Big Lake D-3 A	23,300	0.600	14,000	2,587	11,413	
St. Albert D-3 B	8,000	0.550	4,400	1,371	3,029	
Stettler D-2 A	58,000	0.410	24,000 (1)	14,607	9,393	
Stettler D-3 A	32,500	0.550	17,900	6,465	11,435	Formerly Main D-3
Stettler D-3 B	1,830	0.500	915	433	482	Formerly North-east D-3
Stettler South D-2	10,000	0.280	2,800	623	2,177	
Stettler South D-3	2,000	0.400	800	611	189	
Sturgeon Lake D-3	44,400	0.500	22,200	5,207	16,993	
Sturgeon Lake South Triassic A	15,000	0.080	1,200	1,004	196	
Sturgeon Lake South Triassic B	7,560	0.250	1,890	395	1,495	
Sturgeon Lake South D-3	265,000	0.550	146,000	27,552	118,448	
Sturgeon Lake South D-2	360	0.050	18	18	0	Abandoned July 1963
Sundre Rundle A	80,200	0.400	32,100 (1)	10,236	21,864	
Sundre Rundle B	17,500	0.160	2,800	644	2,156	
Sunset Triassic A	12,200	0.100	1,220	133	1,087	
Swan Hills Beaverhill Lake A & B Total	2,410,000		784,000 (1)	57,712	726,288	
Natural Depletion	842,000	0.130	109,000			
Waterflood	1,570,000	0.430	675,000			
Swan Hills South Beaverhill Lake A & B Total	898,000		392,000 (1)	26,104	365,896	
Natural Depletion	37,600	0.137	5,150			
Waterflood	860,000	0.450	387,000			

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Sylvan Lake Basal Quartz A	2,740	0.050	137	23	114	
Sylvan Lake Cardium A	608	0.100	61	33	28	
Sylvan Lake Glauconitic C	2,120	0.050	106	33	73	
Sylvan Lake Ostracod A	1,600	<0.010	5	5	0	Suspended February 1965
Sylvan Lake Detrital B	6,120	<0.010	15	8	7	
Sylvan Lake Detrital C	700	<0.010	1	0	1	Suspended October 1964
Sylvan Lake Jurassic A	26,300	0.100	2,630	385	2,245	
Sylvan Lake Jurassic B	1,400	<0.010	5	5	0	Suspended April 1965
Sylvan Lake Jurassic C	2,600	0.010	26	16	10	
Sylvan Lake Jurassic D	2,700	0.100	270	45	225	
Sylvan Lake Jurassic E	4,570	<0.010	20	10	10	
Sylvan Lake Jurassic I	2,350	<0.010	2	2	0	Suspended December 1965
Sylvan Lake Jurassic J	2,640	0.010	26	5	21	
Sylvan Lake Elkton B	5,470	0.150	820	63	757	
Sylvan Lake Elkton C	30,000	0.150	4,500	284	4,216	
Sylvan Lake Elkton D	830	0.000	0	0	0	Suspended May 1963
Sylvan Lake Elkton E	702	0.050	35	7	28	
Sylvan Lake Elkton F	2,860	0.100	286	37	249	
Sylvan Lake Pekisko B	42,900	0.150	6,430	514	5,916	
Sylvan Lake Pekisko C	14,300	0.100	1,430	149	1,281	
Sylvan Lake Pekisko D	10,100	0.100	1,010	271	739	
Sylvan Lake Pekisko E	2,280	<0.010	4	4	0	Suspended November 1964
Sylvan Lake Pekisko F	830	0	0	0	0	Abandoned
Sylvan Lake Pekisko G	5,220	<0.010	1	1	0	Suspended May 1964
Sylvan Lake Pekisko M	2,680	<0.010	1	1	0	Suspended April 1965
Sylvan Lake D-3 A	10,200	0.030	306	33	273	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Thompson Lake Blairmore	15,000	0.100	1,500	881	619	
Three Hills Ostracod A	10,200	0.100	1,020	198	822	Formerly Glauconitic A
Twining Rundle A	34,000	0.100	3,400	697	2,703	
Twining North Rundle	43,000	0.100	4,300	400	3,900	
Twining North Banff	180	<0.010	1	0	1	Suspended October 1962
Utikuma Lake Granite Wash A	44,000	0.250	11,000	462	10,538	
Virginia Hills Beaverhill Lake - Total	450,000		174,000 (1)	16,366	157,634	
Natural Depletion	23,200	0.150	3,480			
Waterflood	427,000	0.400	171,000			
Waterton Rundle B	424	<0.010	3	3	0	Suspended January 1961
Wayne-Rosedale Glauconitic C	2,300	0.050	115	43	72	
Wayne-Rosedale Basal Quartz B	18,500	0.040	740	583	157	
Wayne-Rosedale Basal Quartz F	100	0.050	5	5	0	Abandoned December 1958
Wayne-Rosedale Basal Quartz G	488	<0.010	1	1	0	Abandoned August 1963
Wayne-Rosedale Basal Quartz H	991	0.030	30	18	12	
Wayne-Rosedale Basal Quartz O	1,150	0.030	35	23	12	
West Drumheller D-2 A	41,300	0.600	24,800	12,693	12,107	
West Drumheller D-2 B	80	0.050	4	4	0	Suspended May 1965
West Drumheller D-3 A	7,850	0.570	4,470	2,101	2,369	
Westerose D-3	154,000	0.630	97,000	19,161	77,839	
Westward Ho Viking A	465	0.050	23	9	14	
Westward Ho Rundle A	35,000	0.160	5,600 (2)	4,496	1,104	
Whitemud Blairmore	1,500	0.180	270	249	21	
Willesden Green Belly River A	9,460	0.100	946	178	768	
Willesden Green Belly River B	12,000	0.030	360	110	250	
Willesden Green Belly River C	267	<0.010	0	0	0	Abandoned October 1964

(1)	(2)	(3)	(4)	(5)	(6)	(7)
POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Willesden Green Cardium	325,000	0.080	26,000 (2)	12,858	13,142	
Wimborne D-2 A	4,300	0.200	860	291	569	
Wimborne D-2 B	2,070	0.100	207	27	180	
Wimborne D-3 A	94,700	0.063	6,000	1,227	4,773	
Windfall Rundle A	1,000	0.150	150	77	73	
Windfall D-3	102,000	0.030	3,060	798	2,262	
Wintering Hills Lower Mannville A	19,300	0.050	965	28	937	
Wizard Lake Blairmore A	505	<0.010	3	3	0	Abandoned April 1960
Wizard Lake Blairmore B	551	<0.010	2	2	0	Abandoned May 1960
Wizard Lake D-2 A	2,740	0.200	548	443	105	
Wizard Lake D-3 A	380,000	0.640	243,000	47,026	195,974	
Wizard Lake D-3 B	1,010	0.300	303	35	268	
Wood River D-2 A	4,000	0.150	600	43	557	
Wood River D-2 B	2,310	0.100	231	23	208	
Wood River D-3 A	1,850	0.150	278	125	153	
Worsley Triassic A	1,250	0.200	250	83	167	
Worsley D-3 A	77	0.020	2	2	0	Suspended November 1961
Yekau Lake D-2	602	<0.010	1	1	0	Abandoned July 1964
Yekau Lake D-3	6,060	0.500	3,030	921	2,109	
Youngstown Arcs	4,620	0.130	600	293	307	
Undefined and Confidential Pools	310,006		73,044	6,265	66,779	
SUBTOTAL	23,946,576		7,833,497	1,856,385	5,977,112	

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
GOOD PRODUCTION PRACTICE POOLS						
DEL BONITA RUNDLE	2,000	0.250	500	464	36	
DRUMHELLER BLAIRMORE A	3,200	0.013	42	42	0	
HOMEGLEN-RIMBEY D-3	93,500	0.075	7,000	5,092	1,908	
RED COULEE MOULTON A	2,190	0.100	219	183	36	
RED COULEE MOULTON C	1,460	0.200	292	121	171	
TURNER VALLEY SHALLOW	4,460	0.120	536	419	117	
TURNER VALLEY RUNDLE	1,000,000	0.120	120,000 (2)	114,328	5,672	
SUBTOTAL	1,106,810		128,589	120,649	7,940	
TOTAL LIGHT AND MEDIUM CRUDE OIL	25,053,386		7,962,086	1,977,034	5,985,052	

(1) POOL	(2) INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	(3) RECOVERY FACTOR FRACTION	(4) INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	(5) CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	(6) REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	(7) REMARKS
HEAVY CRUDE OIL						
POOLS SUBJECT TO MAXIMUM RATE LIMITATION						
Alderson Mannville	2,390	0.100	239	115	124	
Alderson East Mannville A	9,060	0.100	906	93	813	
Auburndale Wainwright A	1,930	0.050	97	4	93	
Bantry Mannville A	115,000	0.220	25,300	3,411	21,889	
Bantry Mannville B	9,530	0.200	1,910	212	1,698	
Bantry Mannville C	40,400	0.200	8,080	310	7,770	
Bantry Mannville D	19,500	0.200	3,900	185	3,715	
Bantry Mannville F	4,250	0.100	425	74	351	
Bantry Mannville I	262	0.100	26	8	18	
Bonnyville Colony	4,920	0.039	192	192	0	Abandoned 1960
Cessford Basal Colorado B	22,000	0.100	2,200	1,835	365	
Cessford Basal Colorado C	50,500	0.100	5,050	1,329	3,721	
Cessford Mannville B	790	0.080	63	51	12	
Cessford Mannville C	48,000	0.050	2,400	920	1,480	
Cessford Mannville D	6,600	0.100	660	320	340	
Cessford Mannville E	936	0.060	56	23	33	
Cessford Mannville Q	2,100	0.030	63	1	62	
Cessford Pekisko A	400	0.030	12	8	4	
Chauvin Mannville A	13,800	0.200	2,760 (1)	1,784	976	Formerly Main Mannville
Chauvin Mannville B	850	0.100	85	62	23	Formerly Other Mannville
Chauvin South Mannville	2,570	0.040	103	86	17	
Chin Coulee Basal Mannville A	5,670	0.100	567	253	314	
Glenevis Banff	24,500	0.200	4,900	1,594	3,306	
Hazeldine Mannville A	8,790	0.010	88	16	72	
Horsefly Lake Mannville	12,000	0.100	1,200	205	995	

POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
Hughenden Blairmore A	9,730	0.010	97	77	20	Formerly North Blairmore
Hughenden Blairmore B	10,800	0.010	108	45	63	Formerly South Blairmore
Jenner Mannville A	393	0.100	39	8	31	
Jenner Mannville B	2,090	0.100	209	23	186	
Jenner Mannville C	3,320	0.100	332	23	309	
Jenner Mannville E	7,240	0.100	724	27	697	
Jenner Mannville F	19,600	0.050	980	6	974	
Jenner Pekisko A	835	0.100	84	11	73	
Lloydminster Sparky	213,000	0.100	21,300	14,078	7,222	
Lloydminster Colony	1,000	0.100	100	94	6	
Matziwin Pekisko A	5,550	0.200	1,110	128	982	
Matziwin Pekisko B	1,060	0.100	106	11	95	
Paddle River Rundle	8,710	0.200	1,740	206	1,534	
Taber Mannville C	3,470	0.100	347	43	304	
Taber South Mannville A	55,900	0.100	5,590	366	5,224	
Taber South Mannville B	39,600	0.100	3,960	497	3,463	
Taber South-east Mannville A	6,300	0.100	630	207	423	
Vermilion Sparky	27,000	0.050	1,350	1,348	2	
Wainwright Wainwright Total	121,000		23,500 (1)	8,589	14,911	
Natural Depletion	5,300	0.060	318			
Waterflood	116,000	0.200	23,200			
Undefined and Confidential Pools	71,891		6,980	911	6,069	
SUBTOTAL	1,015,237		130,568	39,789	90,779	
GOOD PRODUCTION PRACTICE POOLS						
Baxter Lake Wainwright	4,830	0.100	483	388	95	
Conrad Ellis	12,000	0.200	2,400	2,309	91	

POOL	INITIAL CRUDE OIL IN PLACE THOUSANDS OF ST BBL	RECOVERY FACTOR FRACTION	INITIAL RECOVERABLE CRUDE OIL THOUSANDS OF ST BBL	CUMULATIVE PRODUCTION TO DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMAINING RECOVERABLE CRUDE OIL AS OF DECEMBER 31, 1965 THOUSANDS OF ST BBL	REMARKS
DINA SPARKY	2,620	0.100	262	188	74	
HAROLD LAKE COLONY	810	0.030	24	10	14	
PRINCESS BASAL BLAIRMORE A	240	0.100	24	24	0	
PRINCESS BANFF A	4,640	0.110	510	505	5	
PRINCESS JEFFERSON A	3,340	0.100	334	334	0	
PRINCESS OTHER	1,230	0.100	123	123	0	
TABER MANNVILLE A	16,000	0.100	1,600	1,210	390	
TABER MANNVILLE B	11,900	0.200	2,380	1,703	677	
SUBTOTAL	57,610		8,140	6,794	1,346	
TOTAL HEAVY CRUDE OIL	1,072,847		138,708	46,583	92,125	
PROVINCIAL TOTAL	26,126,233		8,100,794	2,023,617	6,077,177	

(1) SEE TABLE III-2

(2) ENHANCED RECOVERY SCHEMES ARE IN OPERATION BUT NO ADDITIONAL RECOVERABLE RESERVES ARE ATTRIBUTED TO THEM AS YET

(3) COMPRISES THAT PORTION OF THE POOL SUBJECT TO PRIMARY DEPLETION OR TO ENHANCED RECOVERY SCHEMES OF UNCERTAIN BENEFIT

TABLE I-2

INCREASE IN PROVED INITIAL RECOVERABLE RESERVES OF CRUDE OIL ATTRIBUTED TO ENHANCED RECOVERY
DECEMBER 31, 1965

(1) POOL	(2) NATURAL DEPLETION RECOVERY FACTOR FRACTION	(3) INITIAL RECOVERABLE CRUDE OIL BY NATURAL DEPLETION MILLIONS OF STB	(4) RECOVERY FACTOR INCLUDING EFFECT OF ENHANCED RECOVERY FRACTION	(5) INITIAL RECOVERABLE CRUDE OIL MILLIONS OF STB
ACHESON D-3 A	.54	80.5	.70	104.0
CARSON CREEK NORTH BEAVERHILL LAKE A (1)	.15	9.6	.45	28.9
CARSON CREEK NORTH BEAVERHILL LAKE B (1)	.16	33.0	.40	82.4
CHAUVIN MANNVILLE A	.13	1.8	.20	2.7
GARRINGTON CARDIUM A & B (1)	.08	11.8	.15	22.2
GILBY VIKING A (1)	.20	7.6	.45	17.1
GOLDEN SPIKE D-3 A	.70	217.0	.90	279.0
JOFFRE VIKING	.17	13.6	.41	32.8
JUDY CREEK BEAVERHILL LAKE A	.16	129.0	.45	364.0
JUDY CREEK BEAVERHILL LAKE B	.20	51.2	.48	123.0
JUDY CREEK SOUTH BEAVERHILL LAKE	.15	2.3	.20	3.0
KAYBOB BEAVERHILL LAKE A	.16	48.0	.40	120.0
LEDUC-WOODBEND D-2 A	.35	71.7	.45	92.3
LEDUC-WOODBEND D-3 A	.55	162.0	.70	207.0
PEMBINA CARDIUM (1)	.12	676.0	.27	1502.0
SNIPE LAKE BEAVERHILL LAKE (1)	.12	22.8	.40	76.0
STETTLER D-2 A	.30	17.4	.41	24.0
SUNDRE RUNDLE A	.25	20.0	.40	32.1
SWAN HILLS BEAVERHILL LAKE A & B (1)	.18	283.0	.43	675.0
SWAN HILLS SOUTH BEAVERHILL LAKE A & B (1)	.18	155.0	.45	387.0
VIRGINIA HILLS BEAVERHILL LAKE (1)	.18	76.9	.40	171.0
WAINWRIGHT WAINWRIGHT (1)	.06	7.0	.20	23.2
TOTAL		2097.2		4368.7

(1) DATA REFER TO THE PORTION OF THE POOL SUBJECT TO ENHANCED RECOVERY SCHEMES FROM WHICH ADDITIONAL RECOVERY IS ASSURED.

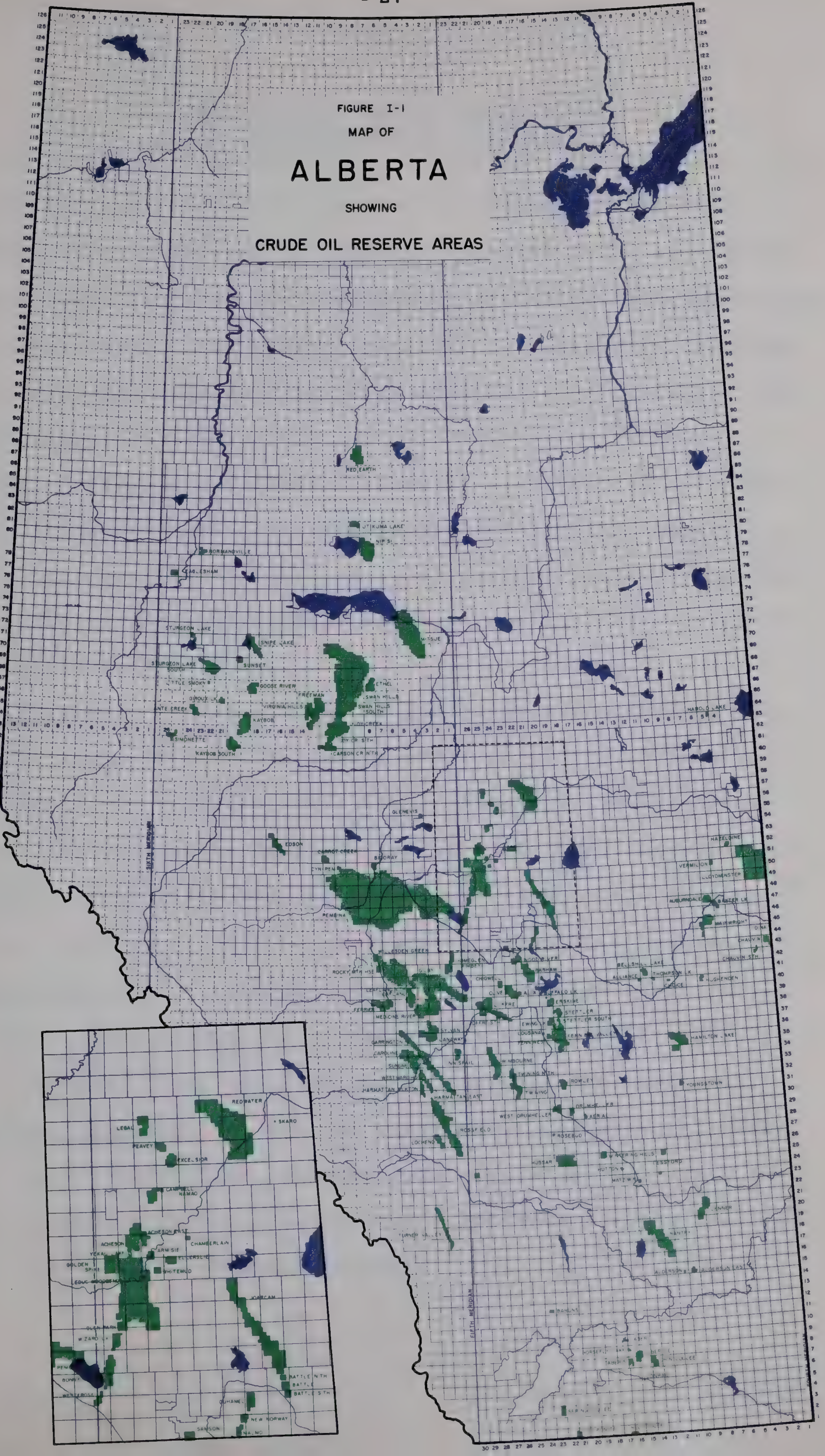

FIGURE I-1

MAP OF

ALBERTA

SHOWING

CRUDE OIL RESERVE AREAS

II THE ESTABLISHED RESERVES OF GAS IN THE PROVINCE OF ALBERTA

The Board estimates the remaining established reserves of marketable gas in Alberta at December 31, 1965 to be some 37.6 trillion cubic feet, or the equivalent of 40.2 trillion cubic feet of 1,000 Btu gas. The present estimate represents an increase on an actual heating value basis of some 2.3 trillion cubic feet since December 31, 1964.

While only the established reserves are referred to in this report, the Board does calculate proved and probable reserves of gas for both confidential and non-confidential pools. The definitions and inter-relationships of these categories of reserves are summarized as follows:

Proved Reserves - consist of the gas recoverable from the area of a pool completely delineated by drilled wells. A portion of the reserves may be under undrilled spacing units which are so close and so related to drilled spacing units that there is every reasonable probability they will be produced when the spacing units are drilled or will be recovered from existing wells.

Probable Reserves - consist of the gas estimated to be recoverable from a pool beyond the proved limits of the pool. The probable pool limits are based on normal geological expectation.

Established Reserves - are the reserves of gas whose existence and estimated amount can reasonably be counted upon. They include all of the proved reserves and a judgment portion (usually 50 per cent) of the probable reserves.

In its estimate of reserves, the Board has had regard for the estimates presented by the industry at various hearings and in applications submitted to it during the year. In many cases, these presentations have provided the Board with data previously unavailable, and which have assisted the Board considerably in making its estimates.

A comparison of the December 31, 1964 estimate and the December 31, 1965 estimate appears in the following tabulation.

	Actual Basis	1,000 Btu Basis
	(Trillions of Cubic Feet)	
Remaining Established Marketable Gas at December 31, 1964	35.3	37.4
Additions to Reserves during 1965	3.2	3.7
Marketable Gas Produced during 1965	0.9	0.9
Remaining Established Marketable Gas at December 31, 1965	37.6	40.2

Of the 3.2 tcf addition to reserves in 1965, some 2.8 tcf was the result of development drilling, extending reserves found in previous years. The remaining 0.4 tcf are the reserves attributed to new discoveries made during the year and which are not yet developed.

The Board's estimate consists of reserves of solution, associated and non-associated gas. A comparison of the 1964 and 1965 estimates of remaining established marketable gas on an actual heating value basis for the three categories is presented in the following tabulation.

Classification of Reserves	Dec. 31, 1964	Dec. 31, 1965	Change
	(Trillions of Cubic Feet)		
Solution	3.1	3.6	+0.5
Associated	4.2	4.3	+0.1
Non-associated	28.0	29.7	+1.7
Total Reserves	35.3	37.6	+2.3

The more significant changes in the 1965 estimate of remaining established reserves have occurred in the following areas.

Area and Zone	Board's Estimate as of Dec. 31, 1964	Board's Estimate as of Dec. 31, 1965	Change	Remarks
	(Billions of Cubic Feet)			
Alderson Second White Specks	100	200	+100	Additional drilling plus re-evaluation
Brazeau River Mississippian	150	300	+150	Additional drilling
Crossfield East Wabamun	120	370	+250	Additional drilling
Edson Mississippian	1,500	1,697	+197	Additional drilling
Gold Creek Wabamun	30	500	+470	Additional drilling
Harmattan-Elkton Leduc	30	150	+120	New interpretation
Pembina Cardium Solution	760	981	+221	Increased solution gas-oil ratio
Swan Hills Beaverhill Lake Solution	394	233	-161	Pool divided into two pools
Swan Hills South Beaverhill Lake Solution	0	150	+150	Formerly included in Swan Hills Field

From the foregoing, the five pools with the most substantial changes in reserve estimates have been chosen for further discussion in the following paragraphs.

Gold Creek

Three new wells plus the incorporation of the Smoky River area into the Gold Creek area have accounted for the largest individual increase in reserves in the Province. A reserve of only 30 bcf was estimated at the end of 1964, whereas the present estimate of initial marketable gas is 500 bcf.

Crossfield East

Five wells were drilled and completed in the Wabamun formation during the past year. This resulted in a large increase in the areal extent of the pool and an accompanying increase in the marketable reserves from 120 bcf at the end of 1964 to 370 bcf at December 31, 1965.

Pembina

The remaining marketable solution gas reserve in the Cardium formation has been increased primarily as a result of re-evaluation of the average solution gas-oil ratio for the pool which has more than offset a reduction in the proved crude oil reserves.

Edson

Nine additional wells have been drilled in the Edson area increasing the pore volume of both Mississippian pools. Eight of the wells were completed in the northern pool and one was completed in the southern pool. The present estimate is an increase of 197 bcf over that of December 31, 1964.

Swan Hills

The Swan Hills Field was divided into two fields, Swan Hills and Swan Hills South. While the estimate of oil reserves for the combined areas has increased, the resulting increase in gas reserves is more than offset by an increase in the expected surface loss in the Swan Hills Field. The net effect has been a slight decrease in the reserve of marketable gas.

Details of the Board's estimate of established reserves are presented in Table II-1. The table does not show individually fields or areas having a marketable reserve less than ten billion cubic feet unless the reserve is supplying a market. Also, the table does not show individually fields or areas in which the data used in calculating the reserve is confidential. The policy respecting the release of information on wells and the publication of reserve estimates is outlined in the Board's letter to all operators dated September 30, 1965. In accordance with the policy, the Board does not publish its estimate of reserves for a pool until one year after the finished drilling date of the first well cased for production.

The sum of the reserves in fields or areas having a marketable reserve of less than ten billion cubic feet and the sum of the reserves in confidential pools are shown separately at the end of Table II-1. Both sums are included in the Provincial total.

The location of the fields and areas contained in the table is shown on Figure II-1.

TABLE II-1

OIL AND GAS CONSERVATION BOARD

ESTABLISHED RESERVES OF GAS IN THE PROVINCE OF ALBERTA, DECEMBER 31, 1965

(14.65 PSIA AND 60^{0}F)

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT BCF	(10) REMARKS
Acheson	Viking	6	25/5	4	1	3	1020*	3	Gas sold to Northwestern Utilities, Limited
	Basal Blairmore	37	20/15	25	3	22	1020	22	
	Leduc Solution	68	35/55	20	5	15	1140	17	
Acheson East	Basal Blairmore	12	15/5	10	-	10	1090	11	Presently considered beyond economic reach
Aden	Bow Island	5	20/5	4	-	4	1000	4	Gas sold to Canadian Montana Gas Company Ltd.
	Basal Colorado	6	15/5	5	1	4	1000	4	
	Sunburst-Swift	3	20/5	2	1	1	1040	1	
	Mississippian	12	10/10	10	4	6	1040	6	
Alderson	Second White Specks	280	25/5	200	-	200	995	200	Presently considered beyond economic reach
	Bow Island	8	25/5	6	-	6	1000	6	
Alexander	Basal Blairmore	130	10/5	110	98	12	1060*	13	Gas sold to North Canadian Oils Limited and Calgary Power Ltd.
Alix	Basal Blairmore	12	10/5	10	-	10	1090	11	Presently considered beyond economic reach
	Nisku Associated and Non-Associated	9	15/10	7	-	7	1130	8	
Antelope	Viking	20	20/5	15	1	14	1020	14	Gas sold to Trans-Canada Pipe Lines Limited
	Banff	12	20/5	9	2	7	1020	7	
Athabasca	Grand Rapids	6	15/5	5	1	4	1000*	4	Supplies local Utility
	Wabamun	4	10/5	3	-	3	980*	3	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS (BCF)	MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	ESTIMATED HEATING VALUE BTU PER CU. FT.	REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	REMARKS
ATHABASCA EAST	WABAMUN	2	10/5	2	1	1	1000	1	SUPPLIES LOCAL UTILITY
ATHABASCA NORTH	WABAMUN	23	30/5	15	-	15	980	15	
ATLEE BUFFALO	BOW ISLAND	120	25/5	85	9	76	970 *	74	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED
	BASAL COLORADO	7	15/5	6	-	6	1020	6	
	BASAL BLAIRMORE	72	20/5	55	-	55	960 *	53	
BANTRY	MILK RIVER	46	20/5	35	1	34	960	33	SUPPLIES LOCAL UTILITY
	BASAL COLORADO	3	20/5	2	-	2	970	2	
	BOW ISLAND	26	20/5	20	-	20	970	21	
	MANNVILLE	37	15/5	30	2	28	1030	29	
	MANNVILLE ASSOCIATED	37	15/5	30	-	30	1160	35	
BASHAW	VIKING	1	15/5	1	-	1	970	1	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	BASAL BLAIRMORE	12	15/5	10	-	10	970	10	
	LEDUC ASSOCIATED	19	15/30	11	1	10	1220	12	
BAWLF	VIKING	21	25/5	15	-	15	1020	15	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	BLAIRMORE	5	30/5	3	-	3	1050	3	
BEAVERHILL LAKE - FORT SASKATCHEWAN	VIKING	620	15/5	500	85	415	1020 *	424	GAS SOLD TO NORTHWESTERN UTILITIES, LIMITED AND CANADIAN INDUSTRIAL GAS AND OIL LTD.
	BLAIRMORE	4	15/5	3	-	3	1000	3	
BELLOY	NOTIKEWIN	9	20/5	7	-	7	1000	7	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	GETHING	62	15/5	50	-	50	1000	50	
	MISSISSIPPIAN	23	10/5	20	-	20	1120	22	
BELLSHILL LAKE	VIKING	6	25/5	4	-	4	1040	4	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	BLAIRMORE	37	15/5	30	-	30	990	30	
	BLAIRMORE ASSOC.	3	15/10	2	-	2	990	2	
BENJAMIN CREEK	MISSISSIPPIAN	100	15/20	70	-	70	1070	75	
BERLAND RIVER	LEDUC	440	10/25	300	-	300	1000	300	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
Berland River West	Wabamun	24	10/30	15	-	15	1020	15	Presently considered beyond economic reach
Bigoray	Blairmore	14	15/5	11	-	11	1080	12	
	Mississippian	13	15/10	10	-	10	1080	11	
Bigstone	Gething	23	10/5	20	-	20	1100	22	
	Dunvegan	29	10/5	25	-	25	1140	29	
	Wabamun	10	15/40	5	-	5	1050	5	
	Leduc	390	15/25	250	-	250	930	233	
Bindloss	Viking	430	15/5	350	73	277	980*	272	Gas sold to Trans-Canada Pipe Lines Limited
	Basal Blairmore	31	15/5	25	-	25	990	25	
Bittern Lake	Viking	3	25/5	2	-	2	1020	2	
	Blairmore	53	15/5	43	-	43	1070	46	
Black Butte	Bow Island	21	15/5	17	2	15	1010	15	Gas sold to Canadian Montana Gas Company Limited
	Basal Colorado	25	15/5	20	6	14	1000	14	
	Blairmore	6	15/5	5	-	5	1000	5	
	Sunburst-Ellis	35	10/15	30	21	9	1000	9	
	Mississippian	11	15/5	9	3	6	1020	6	
Blueridge	Detrital	14	10/5	12	-	12	1100	13	Presently considered beyond economic reach
	Mississippian	1	20/5	1	-	1	1130	1	
Bolloque Lake	Viking	3	25/5	2	-	2	1040	2	Presently considered beyond economic reach
	Basal Blairmore	11	25/5	8	-	8	1100	9	
Bonnie Glen	Cardium	1	15/10	1	-	1	1040	1	Gas sold to Northwestern Utilities, Limited
	Viking	3	15/10	2	-	2	1050	2	
	Blairmore	5	15/10	4	3	1	1100	1	
	Leduc Associated	430	10/15	330	6	324	1220	396	
	Leduc Solution	530	35/25	260	38	222	1220	271	
Bonnyville	Blairmore	5	20/5	4	2	2	980	2	Supplies local Utility

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
Boundary Lake South	Cadomin	8	20/10	6	-	6	1060	6	Gas sold to Westcoast Transmission Company Limited
	Boundary Lake	1	15/10	1	-	1	1050	1	
	Mississippian	37	15/5	30	13	17	1040*	18	
Bow Island	Bow Island	20	20/5	15	-5	20	1110	22	Canadian Western Natural Gas Company Limited Storage Reservoir
Boyle	Blairmore	7	25/5	5	-	5	1000	5	Presently considered beyond economic reach
	Nisku	6	15/5	5	-	5	990	5	
Braeburn	Cadotte	1	25/5	1	-	1	1050	1	
	Cadomin	4	15/5	3	-	3	1060	3	
	Triassic	33	15/10	25	2	23	1090	25	Gas sold to Westcoast Transmission Company Limited
	Permo-Penn	52	15/10	40	2	38	1030	39	
Brazeau River	Mississippian	390	15/10	300	-	300	1040	310	Presently considered beyond economic reach
Brooks	Milk River	9	20/5	7	3	4	990	4	Supplies local Utility
Brown Creek	Mississippian	59	20/15	40	-	40	970	39	Presently considered beyond economic reach
Bruce	Viking	13	25/5	9	-	9	1000	9	
	Mannville	10	20/10	7	-	7	1020	7	
Burnt Timber	Mississippian	390	20/20	250	-	250	1080	270	
Campbell-Namao	Blairmore Assoc. and Solution	33	20/5	25	12	13	1020	13	Gas sold to Canadian Industrial Gas & Oil Ltd.
Carbon	Viking	15	25/5	11	-	11	1020	11	Gas sold to Canadian Western Natural Gas Company Limited
	Basal Colorado	4	15/5	3	-	3	1020	3	
	Blairmore	160	15/5	130	9	121	1100	133	
	Mississippian	16	15/5	13	-	13	1080	14	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS (BCF)	MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	ESTIMATED HEATING VALUE BTU PER CU. FT.	REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	REMARKS
Caroline	Blairmore	39	15/10	30	-	30	1070	32	
	Mississippian	25	15/10	19	-	19	1020	19	
Carson Creek	Beaverhill Lake	320	15/15	230	-3	233	1050	240	Reservoir being cycled
Carson Creek North	Beaverhill Lake Associated	28	15/15	20	-	20	1100	22	Gas injected into Carson Creek
	Beaverhill Lake Solution	440	60/20	140	3	137	1100	150	
Carstairs	Basal Blairmore	5	15/10	4	-	4	1100	4	
	Mississippian	1100	15/10	860	158	702	1110*	780	Gas sold to Trans-Canada Pipe Lines Limited
Castor	Viking	5	20/5	4	-	4	1090*	4	Supplies local Utility
	Blairmore	2	10/5	2	-	2	1090*	2	
Cessford	Viking	110	15/5	90	6	84	1020*	86	Gas sold to Trans-Canada Pipe Lines Limited
	Basal Colorado	1200	15/5	1000	259	741	1020	756	
	Basal Blairmore	460	15/5	370	60	310	1090*	320	
Chigwell	Blairmore	74	10/10	60	8	52	1100*	57	Gas sold to Trans-Canada Pipe Lines Limited
Chinook Ridge	Paddy	12	10/10	10	-	10	1020	10	Presently considered beyond economic reach
	Cadotte	31	10/10	25	-	25	1020	25	
	Notikewin	19	10/10	15	-	15	1020	15	
Chisholm	Blairmore	12	10/5	10	-	10	1020	10	Presently considered beyond economic reach
Clear Hills	Gething	1	15/5	1	-	1	980	1	Presently considered beyond economic reach
	Triassic	8	10/5	7	-	7	1030	7	
	Leduc	4	15/5	3	-	3	1070	3	
Clive	Viking	4	20/5	3	-	3	990	3	Presently considered beyond economic reach
	Blairmore	6	15/5	5	-	5	1020	5	
	Nisku Associated	14	10/15	11	-	11	1150	13	
	Leduc Associated	13	10/25	9	-	9	1200	11	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
Cold Lake	Blairmore	6	25/5	4	3	1	1000	1	Supplies local Utility
Comrey	Second White Specks	4	20/5	3	-	3	940	3	
	Bow Island	29	10/5	25	14	11	940	11	Gas sold to Canadian Montana Gas Company Ltd.
Connorsville	Viking	8	20/5	6	1	5	99	5	Gas sold to Trans-Canada Pipe Lines Limited
	Basal Blairmore	62	15/5	50	1	49	1130	55	
Countess	Bow Island	92	20/5	70	4	66	1000 *	66	
	Basal Colorado	140	25/5	100	48	52	1000 *	52	Gas sold to Trans-Canada Pipe Lines Limited
	Basal Blairmore	43	20/5	33	3	30	1020 *	31	
	Mississippian	2	15/5	2	-	2	960	2	
	Mississippian Assoc.	3	20/10	2	-	2	960	2	
Craigend	Grand Rapids	6	25/5	4	-	4	1000	4	
	Grosmont	140	25/5	100	-	100	1000	100	
Crimson Lake	Cardium	22	20/10	16	-	16	1100	18	Presently considered beyond economic reach
Crosseield	Basal Blairmore	91	15/10	70	-	70	1100	77	Gas sold to Alberta and Southern Gas Co. Ltd. and Westcoast Transmission Company Limited
	Elkton-Calgary	900	15/15	650	108	542	1120 *	610	
	Elkton-Crossfield	1200	10/10	1000	82	918	1120 *	1220	
	Wabamun	1600	15~~/50~~	680	39	641	1120 *	720	
Crossfteld East	Blairmore	1	15/10	1	-	1	1000	1	Gas sold to Trans-Canada Pipe Lines Limited
	Mississippian	130	10/15	100	8	92	1120	103	
	Wabamun	1000	10/60	370	-	370	1060	390	
Dixonville	Gething	12	10/5	10	-	10	1000	10	Presently considered beyond economic reach
Donalda	Viking	40	20/5	30	-	30	970	29	Presently considered beyond economic reach
	Basal Blairmore	5	15/5	4	-	4	970	4	
	Detrital	5	20/5	4	-	4	990	4	
Dorothy	Basal Blairmore	24	15/5	19	-	19	1000	19	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
Dowling Lake	Basal Blairmore	5	20/5	4	1	3	1030*	3	Supplies local Utility
Drumheller	Viking	3	25/5	2	-	2	1100	2	
	Blairmore	29	10/5	25	-	25	1100	28	
Duhamel	Viking	4	10/5	3	-	3	1000	3	
	Blairmore	4	10/5	3	-	3	1030	3	
	Devonian	14	40/15	7	-	7	1100	8	
Duvernay	Viking	4	20/5	3	2	1	1000*	1	Gas sold to Western Minerals Ltd. Plant and supplies local Utility
Dyberg	Belly River	3	20/5	2	-	2	950	2	Presently considered beyond economic reach
	Viking	8	10/5	7	-	7	1000	7	
	Basal Blairmore	12	10/5	10	-	10	1020	10	
Eaglesham	Gething	6	15/5	5	-	5	1000	5	Presently considered beyond economic reach
	Cadomin	6	15/5	5	-	5	1060	5	
	Mississippian	62	15/5	50	-	50	1110	55	
Edson	Gething	82	15/10	63	-	63	1050	66	Gas sold to Trans-Canada Pipe Lines Limited
	Mississippian	2400	15/15	1700	3	1697	1030	1750	
Edwand	Mannville	8	25/5	6	-	6	1000	6	Supplies local Utility
	Nisku	13	25/5	9	-	9	1000	9	
Elk Point	Mannville	3	20/5	2	1	1	990*	1	Supplies local Utility
Ellerslie	Blairmore	3	20/5	2	1	1	1000	1	Gas sold to Edmonton Liquid Gas Ltd.
Enchant	Milk River	5	30/5	3	-	3	1030	3	Gas sold to Trans-Canada Pipe Lines Limited
	Bow Island	25	25/5	18	2	16	960*	15	
	Basal Blairmore	12	15/10	10	2	8	1040*	8	
	Ellis	3	25/10	2	-	2	1030	2	
	Mississippian	5	15/10	4	1	3	1040*	3	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
Erskine	Viking	4	20/5	3	-	3	1040	3	
	Blairmore	24	20/10	17	1	16	1090	17	Supplies local Utility
	Leduc Associated	29	10/20	21	-	21	1070	22	
	Leduc Solution	18	35/75	3	-	3	1110	3	
Esther	Victoria	23	30/5	15	-	15	990	15	Gas sold to Trans-Canada Pipe Lines Limited
	Banff	20	10/5	17	-	17	1000	17	
Etzikom	Bow Island	79	20/5	60	29	31	930	29	Gas sold to South Alberta Pipe Lines Limited
	Basal Blairmore	1	25/5	1	-	1	1010	1	
Excelsior	Viking	9	15/5	7	2	5	1000	5	
	Basal Blairmore	39	10/5	33	-	33	970	32	
Eyremore	Bow Island	15	30/5	10	-	10	960	10	Presently considered beyond economic reach
Fairydell-Bon Accord	Viking	130	20/5	100	13	87	1020 *	89	Gas sold to Northwestern Utilities, Limited
	Basal Blairmore	20	20/5	15	2	13	990 *	13	
Faust South	Gething	12	10/5	10	-	10	990	10	Presently considered beyond economic reach
Fenn-Big Valley	Viking	20	20/5	15	5	10	1000 *	10	
	Nisku Solution	150	45/35	53	7	46	1110	51	Gas sold to Northwestern Utilities, Limited
	Leduc Associated and Solution	13	45/45	4	1	3	1110	3	
Ferrier	Cardium	8	20/10	6	-	6	1000	6	
	Nordegg	4	25/5	3	-	3	1080	3	
	Mississippian	3	20/10	2	-	2	1100	2	
Figure Lake	Viking	6	25/5	4	-	4	960	4	Presently considered beyond economic reach
	Blairmore	11	15/5	9	-	9	1000	9	
	Nisku	19	15/5	15	-	15	1000	15	
Flatbush	Mannville	13	20/5	10	-	10	1000	10	Presently considered beyond economic reach

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
Foremost	Bow Island	33	15/5	27	6	21	950	20	Gas sold to Canadian Western Natural Gas Company Limited
Fort Kent	Blairmore	5	20/5	4	1	3	980	3	Supplies local Utility
Fox Creek	Viking	6	15/5	5	-	5	1160	6	Presently considered beyond economic reach
	Gething	1	25/5	1	-	1	1160	1	
	Triassic	5	15/10	4	-	4	1160	5	
Fox Creek North	Cadomin	17	20/5	13	-	13	1160	15	Presently considered beyond economic reach
Fox Creek West	Viking	4	25/5	3	-	3	1160	3	Presently considered beyond economic reach
	Gething	15	10/5	13	-	13	1020	13	
	Nisku	18	10/20	13	-	13	1150	15	
Garrington	Viking Associated and Non-Associated	130	20/10	90	-	90	1130	102	
	Blairmore	10	15/10	8	-	8	1010	8	
	Mississippian	1	15/10	1	-	1	1020	1	
	Leduc	37	15/20	25	-	25	1020	26	
Ghost Pine	Blairmore	52	15/10	40	-	40	1010	40	
	Blairmore Assoc.	14	20/5	11	-	11	1050	12	
	Mississippian	9	15/5	7	-	7	1070	7	
Gilby	Cardium	3	15/10	2	-	2	1000	2	
	Viking	4	20/5	3	-	3	1220	4	
	Viking Solution	17	40/40	6	-	6	1250	7	
	Blairmore	260	10/15	200	9	191	1090*	208	Gas sold to Trans-Canada Pipe Lines Limited
	Blairmore Solution	20	40/40	7	-	7	1250	9	
	Jurassic	250	20/10	180	10	170	1090*	185	
	Jurassic Solution	43	50/40	13	-	13	1100	14	
	Pekisko	420	10/15	320	51	269	1090*	293	
	Banff	4	20/15	3	-	3	1100	3	
	Wabamun	7	10/20	5	-	5	1170	6	
Glenevis	Mannville	15	15/5	12	-	12	1040	12	Presently considered beyond economic reach

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS (BCF)	MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	ESTIMATED HEATING VALUE BTU PER CU. FT.	REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT BCF	REMARKS
Glen Park	Basal Blairmore	7	20/5	5	1	4	1140	5	Gas sold to Northwestern Utilities, Limited
	Leduc Solution	16	35/15	9	1	8	1250	10	
Gold Creek	Wabamun	840	15/30	500	-	500	1050	525	
Golden Spike	Viking	8	20/5	6	1	5	1050	5	Gas injected into Leduc zone
	Blairmore	22	10/5	19	1	18	1050	19	
	Wabamun	26	10/15	20	10	10	1060	11	
	Nisku Associated	4	15/15	3	-	3	1220	4	
	Nisku Solution	6	35/20	3	1	2	1220	2	Gas injected into Leduc zone
	Leduc Solution	130	30/30	64	-22	86	1290	111	
Goodwin Lake	Jurassic	20	15/10	15	-	15	1070	16	Presently considered beyond economic reach
Gordondale	Paddy	91	50/5	43	22	21	1000	21	Gas sold to Westcoast Transmission Company Limited
	Gething	53	15/5	43	28	15	1020	15	
Greencourt	Jurassic-Detrital	65	15/10	50	-	50	1070	54	Presently considered beyond economic reach
	Mississippian Associated	37	25/10	25	-	25	1130	28	
Hackett	Basal Blairmore	62	10/10	50	3	47	1100	52	Gas sold to Trans-Canada Pipe Lines Limited
Hairy Hill	Viking	1	25/5	1	-	1	980	1	Gas sold to Western Minerals Limited
	Blairmore	23	10/5	20	8	12	1000 *	12	
	Nisku	3	20/5	2	-	2	1000	2	
Hamelin Creek	Cadotte	3	20/5	2	-	2	1000	2	
	Gething	4	15/5	3	-	3	1010	3	
	Cadomin	21	15/5	17	5	12	1060	13	Supplies local utility
Hamilton Lake	Viking Associated and non-associated	13	25/5	9	-	9	1040	9	Presently considered beyond economic reach
	Mannville	5	15/5	4	-	4	1040	4	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
HARMATTAN EAST	MISSISSIPPIAN ASSOCIATED	1200	10/15	900	-7	907	1080	980	RESERVOIR BEING CYCLED GAS INJECTED INTO GAS CAP
	MISSISSIPPIAN SOLUTION	170	25/25	97	7	90	1280	140	
HARMATTAN-ELKTON	MISSISSIPPIAN	55	15/15	40	-	40	1040	41	
	MISSISSIPPIAN ASSOCIATED	1200	10/15	900	-20	920	1080	990	RESERVOIR BEING CYCLED
	MISSISSIPPIAN SOLUTION	180	25/30	96	20	76	1280	97	GAS BEING INJECTED INTO GAS CAP
	LEDUC	440	15/60	150	-	150	1100	165	
HEART RIVER	CADOTTE	2	15/5	2	-	2	1000	2	SUPPLIES LOCAL UTILITY
	NOTIKEWIN	2	10/5	2	-	2	1000	2	
HERCULES	VIKING	19	15/5	15	-	15	1050	16	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	BLAIRMORE	29	10/5	25	-	25	960	24	
HIGH PRAIRIE	CADOTTE	4	15/5	3	-	3	1000	3	
	NOTIKEWIN	7	15/5	6	-	6	1100	7	
	GETHING	1	15/5	1	-	1	1000	1	
HOLBURN	CARDIUM	6	25/5	4	-	4	980	4	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	BLAIRMORE	25	20/10	18	-	18	1120	20	
HOLMBERG	BLAIRMORE	25	15/5	20	-	20	1050	21	GAS SOLD TO BAROID OF CANADA LTD. PLANT
HOMEGLEN-RIMBEY	LEDUC ASSOCIATED AND SOLUTION	1000	10/15	800	155	645	1070 *	690	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED AND ALBERTA & SOUTHERN GAS CO. LTD.
HUNTER VALLEY	MISSISSIPPIAN	78	15/25	50	-	50	1080	54	
HUSSAR	BELLY RIVER	3	25/5	2	1	1	1000	1	
	VIKING	66	20/5	50	5	45	1020 *	46	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED
	BASAL COLORADO	56	25/5	40	10	30	1020 *	31	
	BASAL BLAIRMORE	610	15/5	490	78	412	1050 *	430	

(1) Field or Area	(2) Zone	(3) Initial Gas in Place BCF	(4) Losses Reservoir/Surface Per Cent	(5) Initial Marketable Gas (BCF)	(6) Marketable Gas Produced to Dec 31 1965 BCF	(7) Remaining Marketable Gas to Dec 31 1965 BCF	(8) Estimated Heating Value BTU per Cu. Ft.	(9) Remaining Marketable Gas at 1000 BTU per Cu. Ft BCF	(10) Remarks
Hutton	Viking Associated and Non-associated	25	25/5	18	-	18	1000	18	Presently considered beyond economic reach
	Blairmore	17	20/5	13	-	13	1000	13	
Inland	Viking	21	25/5	15	-	15	980	15	
Innisfail	Mississippian	22	10/10	18	-	18	1080	19	
	Wabamun	4	15/15	3	-	3	1170	4	
	Leduc Associated	17	10/35	10	-	10	1020	10	Gas sold to Trans-Canada Pipe Lines Limited
	Leduc Solution	200	45/45	60	13	47	1130*	53	
Jarrow	Viking	4	25/5	3	-	3	1010	3	
	Mannville	10	15/5	8	-	8	1030	8	
Jarvie	Viking	10	25/5	7	-	7	1040	7	Presently considered beyond economic reach
	Blairmore	10	15/5	8	-	8	1100	9	
Jenner	Bow Island	4	25/5	3	-	3	990	3	
	Basal Colorado	7	20/5	5	-	5	1040	5	
	Blairmore	29	20/5	22	-	22	1050	23	
	Mississippian	2	15/5	2	-	2	1000	2	
Joarcam	Viking Associated	66	20/5	50	-	50	1040	52	Within economic reach but deferred
Joffre	Viking	1	25/5	1	-	1	1000	1	Presently considered beyond economic reach
	Basal Blairmore	44	20/10	32	-	32	1020	33	
	Leduc	3	15/10	2	-	2	1050	2	
Judy Creek	Viking	13	20/5	10	-	10	1020	10	Gas sold to Northwestern Utilities, Limited
	Beaverhill Lake Solution	820	55/35	240	9	231	1080	250	
Judy Creek South	Mississippian	12	10/10	10	-	10	1050	11	Presently considered beyond economic reach
Jumping Pound	MISSISSIPPIAN	760	15/15	550	223	327	1050	343	Gas sold to Canadian Western Natural Gas Company Limited

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE (BCF)	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS (BCF)	MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	ESTIMATED HEATING VALUE BTU PER CU. FT.	REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT BCF	REMARKS
Jumping Pound West	Mississippian	1100	20/20	700	-	700	1050	735	
Kaybob	Notikewin	310	15/5	250	36	214	1100*	240	Gas sold to Alberta & Southern Gas Co. Ltd.
	Spirit River	7	15/5	6	-	6	1000	6	
	Gething	15	15/5	12	-	12	1050	13	
	Cadomin	120	15/5	100	-	100	1040	104	
	Winterburn	5	15/35	3	-	3	1070	3	
	Beaverhill Lake Associated	4	20/15	3	-	3	1070	3	
	Beaverhill Lake Solution	330	60/25	100	5	95	1140	108	Gas sold to Alberta & Southern Gas Co. Ltd.
Kaybob South	Viking	26	20/5	20	-	20	1100	22	
	Cadomin	74	15/5	60	-	60	1040	62	
	Triassic	4	20/5	3	-	3	1160	3	
	Triassic Solution	99	30/25	52	-	52	1160	60	
	Nisku	1	20/5	1	-	1	1240	1	
	Beaverhill Lake	24	10/30	15	-	15	1210	18	
Kessler	Viking	73	25/5	52	6	46	1020*	47	Gas sold to Trans-Canada Pipe Lines Limited
	Mannville	5	10/5	4	-	4	990	4	
Killam	Viking	4	25/5	3	-	3	1040	3	Presently considered beyond economic reach
	Blairmore	9	15/5	7	-	7	1000	7	
Kirkcaldy	Basal Mannville	20	20/5	15	-	15	1000	15	
	Mississippian	39	15/10	30	-	30	1010	30	
Knappen	Sunburst-Ellis	18	20/10	13	-	13	1000	13	Gas sold to Canadian Montana Gas Company Ltd.
	Mississippian	8	15/10	6	-	6	1000	6	
Kneller	Blairmore	24	20/5	18	-	18	1100	20	Presently considered beyond economic reach
Knopcik	Doe Creek	17	25/5	12	-	12	1000	12	
Lac La Biche	Viking	14	25/5	10	-	10	1010	10	Presently considered beyond economic reach
	Blairmore	20	20/5	15	1	14	1010	14	Supplies Local Utility

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Field or Area	Zone	Initial Gas in Place BCF	Losses Reservoir/Surface Per Cent	Initial Marketable Gas (BCF)	Marketable Gas Produced to Dec 31 1965 BCF	Remaining Marketable Gas to Dec 31 1965 BCF	Estimated Heating Value BTU per Cu. Ft.	Remaining Marketable Gas at 1000 BTU per Cu.Ft. BCF	Remarks
Lambert Creek	Wabamun	15	25/10	10	-	10	1050	11	Presently considered beyond economic reach
Leafland	Blairmore	14	20/10	11	-	11	1000	11	Presently considered beyond economic reach
	Mississippian	3	20/5	2	-	2	1000	2	
Leafland North	Belly River	11	20/5	8	-	8	1000	8	
	Cardium	5	20/5	4	-	4	1000	4	
Leahurst	Blairmore	37	15/5	30	1	29	1160 *	34	Supplies Local Utility
Leduc-Woodbend	Viking	20	20/5	15	3	12	1070	13	Injected into Nisku and Leduc Gas Caps
	Basal Blairmore	85	20/5	65	18	47	1180	56	
	Wabamun	1	15/10	1	-	1	1050	1	
	Nisku Associated	37	10/15	28	-7	35	1180	41	
	Nisku Solution	180	25/30	94	66	28	1180	29	Gas sold to Northwestern Utilities, Limited
	Leduc Associated	420	15/15	300	-12	312	1180	379	
	Leduc Solution	170	40/30	70	55	15	1180	18	
Lindbergh	Viking	3	35/5	2	-	2	990 *	2	
	Blairmore	18	20/5	14	5	9	1000 *	9	Supplies Salt Plant
Lloydminster	Blairmore	24	15/30	14	12	2	950	2	Supplies Local Utility
Lone Pine Creek	Basal Blairmore	4	15/10	3	-	3	1020	3	
	Wabamun	220	20/20	140	-	140	1030	144	
	Leduc	59	15/20	40	-	40	1050	42	
Long Coulee	Mannville	26	20/5	20	-	20	1000	20	Presently considered beyond economic reach
Lookout Butte	Mississippian	500	15/5	400	-	400	1040	415	Reservoir being cycled
Lovett River	Blairmore	12	10/5	10	-	10	1040	10	Presently considered beyond economic reach
	Mississippian	86	10/10	70	-	70	1040	73	
Majeau Lake	Blairmore	3	20/5	2	-	2	1000	2	Presently considered beyond economic reach
	Mississippian	12	10/10	10	-	10	1070	11	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	(10) REMARKS
Malmo	Viking	7	15/5	6	-	6	1000	6	Presently considered beyond economic reach
	Blairmore	7	15/10	5	-	5	1030	5	
	Devonian	6	20/20	4	-	4	1100	4	
Manyberries	Bow Island	34	20/5	26	20	6	940	6	Gas sold to Canadian Montana Gas Company Ltd.
Marsh Head Creek	Leduc	27	15/35	15	-	15	1050	16	Presently considered beyond economic reach
Marten Hills	Pelican	2	35/5	1	-	1	990	1	
	Grand Rapids	5	35/5	3	-	3	990	3	
	Wabiskaw	680	30/5	450	-	450	990	446	
	Wabamun	300	30/5	200	-	200	1000	200	
Matziwin	Viking	11	15/5	9	-	9	1000	9	Presently considered beyond economic reach
	Blairmore	1	15/5	1	-	1	1030	1	
Mazeppa	Mississippian	20	10/15	15	-	15	1060	16	Presently considered beyond economic reach
McLeod	Belly River	1	15/5	1	-	1	980	1	Presently considered beyond economic reach
	Cadomin	6	25/10	4	-	4	1010	4	
	Jurassic	7	25/10	5	-	5	1030	5	
Medicine Hat	Medicine Hat	2400	20/5	1800	369	1431	970	1390	Gas sold to Trans-Canada Pipe Lines Limited, Many Islands Pipe Lines Ltd. and supplies local Utility.
	Bow Island	14	25/5	10	1	9	970	9	
	Ellis	25	15/5	20	-	20	1000	20	
Medicine River	Blairmore Associated and non-associated	160	20/5	120	-	120	1150	138	
	Blairmore Solution	36	40/45	12	-	12	1250	15	
	Jurassic Associated and non-Associated	46	20/5	35	-	35	1020	36	
	Jurassic Solution	73	35/45	26	-	26	1100	29	
	Mississippian Associated and non-Associated	20	15/10	15	-	15	1100	16	
	Mississippian Solution	30	40/45	10	-	10	1200	12	
	Leduc Associated	6	10/20	4	-	4	1000	4	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	(10) REMARKS
Millet	Blairmore	21	20/10	15	-	15	1020	15	Presently considered beyond economic reach
Minnehik-Buck Lake	Blairmore	6	25/5	4	-	4	1000	4	
	Mississippian	550	15/10	420	51	369	1130	417	Gas sold to Alberta & Southern Gas Co. Ltd.
Mitsue	Gilwood Solution	390	45/25	160	-	160	1170	187	Presently considered beyond economic reach
Moose Mountain	Mississippian	75	20/25	45	-	45	1000	45	Presently considered beyond economic reach
Morinville	Viking	3	25/5	2	-	2	1000	2	Gas sold to Canadian Industrial Gas & Oil Ltd. and supplies local Utility
	Blairmore	140	20/10	100	38	62	1070	66	
Mountain Park	Triassic	29	10/5	25	-	25	1090	27	Presently considered beyond economic reach
Nevis	Blairmore	65	15/10	50	-	50	1000	50	
	Devonian	930	15/15	670	106	564	1000	564	Gas sold to Trans-Canada Pipe Lines Limited
New Norway	Viking	3	20/5	2	-	2	1010	2	Presently considered beyond economic reach
	Blairmore	11	10/5	9	-	9	1030	9	
Nipisi	Gilwood Solution	230	45/25	96	-	96	1150	110	Presently considered beyond economic reach
Nordegg	Triassic	9	10/10	7	-	7	1000	7	Presently considered beyond economic reach
	Mississippian	25	10/10	20	-	20	1000	20	
Normandville	Gething	15	15/5	12	-	12	980	12	
	Triassic	4	15/5	3	-	3	1090	3	
	Mississippian	31	15/5	25	2	23	1050	24	Supplies local Utility
Obed	Mississippian	17	15/10	13	-	13	1040	14	Presently considered beyond economic reach

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF.	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	(10) REMARKS
OBERLIN	BLAIRMORE	3	20/5	2	2	<1	1090*	<1	SUPPLIES LOCAL UTILITY
OKOTOKS	WABAMUN	420	10/60	150	31	119	1000	119	GAS SOLD TO CANADIAN WESTERN NATURAL GAS COMPANY LIMITED
OLDS	WABAMUN	370	15/20	250	12	238	1050	250	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED
OYEN	VIKING	43	15/5	35	5	30	980 *	29	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED
	DETRITAL	11	15/5	9	1	8	1010 *	8	
PADDLE RIVER	JURASSIC	220	35/10	130	-	130	1070	139	
	MISSISSIPPIAN	30	25/10	20	-	20	1060	21	
PAKOWKI LAKE	BOW ISLAND	14	25/5	10	5	5	940	5	GAS SOLD TO CANADIAN MONTANA GAS COMPANY LTD.
PARFLESH	VIKING	3	20/5	2	-	2	1000	2	
	MANNVILLE	10	15/5	8	-	8	1000	8	
PARKLAND NORTH-EAST	MISSISSIPPIAN	21	15/15	15	-	15	1010	15	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
PEMBINA	BELLY RIVER ASSOC AND NON-ASSOCIATED	79	20/5	60	1	59	1180	70	GAS SOLD TO NORTHWESTERN UTILITIES, LIMITED
	BELLY RIVER SOLUTION	100	55/80	9	2	7	1180	8	
	CARDIUM SOLUTION	4200	55/40	1121	140	981	1170	1150	
	VIKING	11	20/5	8	-	8	1100	9	
	BLAIRMORE	260	15/10	200	16	184	1120	206	
	JURASSIC	19	15/5	15	-	15	1050	16	
	MISSISSIPPIAN	14	15/15	10	-	10	1050	11	
PENDANT D'OREILLE	BOW ISLAND	180	20/5	140	82	58	940	54	GAS SOLD TO CANADIAN MONTANA GAS COMPANY LTD.
	MANNVILLE	66	20/5	50	10	40	1000	40	
PENHOLD	VIKING	14	10/5	12	-	12	1020	12	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
FIELD OR AREA	ZONE	INITIAL GAS IN PLACE BCF	LOSSES RESERVOIR/SURFACE PER CENT	INITIAL MARKETABLE GAS (BCF)	MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	ESTIMATED HEATING VALUE BTU PER CU. FT.	REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	REMARKS
Phil Can	Gething	12	20/5	9	-	9	980	9	Presently considered beyond economic reach
	Mississippian	5	15/5	4	-	4	1050	4	
Pincher Creek	Mississippian	1100	35/25	540	231	309	1020*	315	Gas sold to Trans-Canada Pipe Lines Limited
Pine Creek	Wabamun	210	15/50	90	2	88	1050*	92	Gas used to maintain pressure in Windfall field
	Leduc	1000	50/35	330	100	230	1050*	240	
Pine North-West	Leduc	180	15/35	100	-	100	1050	105	
Plain Lake	Viking	3	25/5	2	-	2	980	2	Presently considered beyond economic reach
	Blairmore	28	20/5	21	-	21	1000	21	
Plover Lake	Viking	19	15/5	15	-	15	1000	15	Presently considered beyond economic reach
Pouce Coupe	Peace River	180	35/5	110	73	37	1000	37	Gas sold to Westcoast Transmission Company Limited
	Cadomin	4	15/5	3	-	3	1060	3	
Pouce Coupe South	Doe Creek	4	40/5	2	1	1	1000	1	Gas sold to Westcoast Transmission Company Limited and Peace River Transmission Co. Ltd.
	Peace River	90	30/5	60	44	16	1040	17	
	Gething	16	20/5	12	10	2	1000	2	
	Cadomin	3	20/5	2	2	<1	1000	<1	
	Triassic	17	20/5	13	-	13	1000	13	
Prevo	Basal Mannville	5	15/10	4	-	4	1020	4	Gas sold to Trans-Canada Pipe Lines Limited
	Mississippian	44	15/10	34	4	30	1110*	33	
Princess	Second White Specks	60	30/5	40	2	38	970*	37	Gas sold to Trans-Canada Pipe Lines Limited
	Bow Island	1	25/5	1	-	1	1010	1	
	Basal Colorado	18	20/5	14	1	13	1020 *	13	
	Basal Mannville	110	20/5	80	17	63	1020 *	64	
	Jefferson	31	15/5	25	1	24	1030 *	25	
Provost	Viking	820	20/5	620	160	460	1030 *	473	Gas sold to Trans-Canada Pipe Lines Limited
	Blairmore	19	15/5	15	-	15	1000	15	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	(10) REMARKS
Redland	Belly River	2	35/5	1	-	1	1000	1	
	Viking	3	20/5	2	-	2	1000	2	Supplies local Utility
	Blairmore	19	15/5	15	-	15	1050	16	
Redwater	Viking	14	25/5	10	1	9	1040	9	Supplies local Utility
	Leduc Solution	230	40/65	49	9	40	1220	49	Gas sold to Canadian Industrial Gas & Oil Ltd.
Red Willow	Viking	13	20/5	10	-	10	1020	10	Presently considered beyond economic reach
	Basal Blairmore	8	20/10	6	-	6	1100	7	
Retlaw	Bow Island	3	25/5	2	-	2	950	2	
	Basal Colorado	7	25/5	5	-	5	1020	2	Gas sold to Trans-Canada Pipe Lines Limited
	Basal Blairmore	56	20/10	40	1	39	1000	39	
Rich	Basal Blairmore	16	15/10	12	-	12	1100	13	
Richdale	Viking	14	25/5	10	-	10	1010	10	Presently considered beyond economic reach
	Basal Blairmore	11	25/5	8	-	8	1050	8	
Rochester	Viking	5	20/5	4	-	4	1000	4	Presently considered beyond economic reach
	Blairmore	27	25/5	19	-	19	1000	19	
	Wabamun	6	10/5	5	-	5	1070	5	
Rolling Hills	Bow Island	19	15/5	15	-	15	970	15	Presently considered beyond economic reach
	Basal Colorado	12	15/5	10	-	10	1030	10	
Rowley	Basal Belly River	5	20/5	4	-	4	1000	4	
	Viking	29	10/5	25	-	25	1040	26	
	Mannville	20	15/5	16	-	16	1050	17	
	Mississippian Associated and non-associated	49	10/10	40	-	40	1080	43	
Rycroft	Gething	16	15/5	13	3	10	1040	10	Supplies local Utility
St. Albert-Big Lake	Viking	3	20/5	2	-	2	1070 *	2	Gas sold to Canadian Industrial Gas & Oil Ltd.
	Blairmore	150	15/5	120	54	66	1070 *	71	

(1) Field or Area	(2) Zone	(3) Initial Gas in Place BCF	(4) Losses Reservoir/Surface Per Cent	(5) Initial Marketable Gas (BCF)	(6) Marketable Gas Produced to Dec 31 1965 BCF	(7) Remaining Marketable Gas to Dec 31 1965 BCF	(8) Estimated Heating Value BTU per Cu. Ft.	(9) Remaining Marketable Gas at 1000 BTU per Cu.Ft. BCF	(10) Remarks
St. Paul	Blairmore	5	20/5	4	3	1	1000*	1	Supplies local Utility
Saddle Hills	Peace River	48	30/5	32	-	32	1020	33	
	Gething	3	20/5	2	-	2	980	2	
	Permo-Penn	20	20/5	15	-	15	1030	15	
Samson	Basal Blairmore Associated and Solution	17	25/5	12	4	8	1040	8	Gas sold to Northwestern Utilities, Limited
Sarcee	Mississippian	210	15/15	150	23	127	1050	136	Gas sold to Canadian Western Natural Gas Company Limited
Savanna Creek	Mississippian	590	10/25	400	18	382	1020	390	Gas sold to Westcoast Transmission Company Ltd.
Sedalia	Viking	130	20/5	100	4	96	1010 *	97	Gas sold to Trans-Canada Pipe Lines Limited
	Blairmore	1	25/5	1	-	1	1010	1	
Sibbald	Viking	33	20/5	25	9	16	960 *	15	Gas sold to Trans-Canada Pipe Lines Limited
	Basal Colorado	13	20/5	10	-	10	970	10	
	Banff	1	20/5	1	-	1	1050	1	
Simonette	Cadomin	20	15/10	15	-	15	1060	16	
	Wabamun	140	10/35	80	-	80	1070	86	
	Leduc Solution	270	45/45	81	-	81	1020	82	
Smith Coulee	Bow Island	49	25/5	35	17	18	930	17	Gas sold to Canadian Montana Gas Company Limited
Standard	Viking	26	20/5	20	-	20	1000	20	
Steen River	Slave Point	13	10/15	10	-	10	1070	11	Presently considered beyond economic reach

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	(10) REMARKS
STEEP CREEK	GETHING	6	15/5	5	-	5	1020	5	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	TRIASSIC	7	15/10	5	-	5	1080	5	
	PERMO-PENN	12	10/10	10	-	10	1030	10	
STETTLER	VIKING	4	25/5	3	-	3	1020	3	GAS SOLD TO NORTHWESTERN UTILITIES, LIMITED AND USED AS COMPRESSOR FUEL
	NISKU SOLUTION	20	45/45	6	2	4	1130	5	
	LEDUC SOLUTION	13	45/45	4	1	3	1140	3	
STOLBERG	MISSISSIPPIAN	87	10/10	70	-	70	1040	73	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
STRATHMORE	BELLY RIVER	7	20/5	5	-	5	1000	5	GAS SOLD TO CANADIAN WESTERN NATURAL GAS COMPANY LIMITED
	VIKING	7	20/5	5	-	5	1000	5	
	MISSISSIPPIAN	1	20/5	1	-	1	1080	1	
STURGEON LAKE	GETHING	12	15/5	10	-	10	1000	10	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	GILWOOD	3	25/5	2	-	2	1100	2	
STURGEON LAKE SOUTH	GETHING	16	15/5	13	-	13	1000	13	GAS SOLD TO CANADIAN UTILITIES LIMITED
	CADOMIN	6	15/5	5	-	5	1060	5	
	TRIASSIC ASSOCIATED	5	10/5	4	-	4	1180	5	
	TRIASSIC SOLUTION	15	35/70	3	-	3	1180	4	
	WABAMUN	7	10/25	5	-	5	1070	5	
	LEDUC ASSOCIATED	7	10/25	5	-	5	1080	5	
	LEDUC SOLUTION	270	45/45	83	10	73	1080	79	
STURGEON LAKE SOUTH GENERAL AREA	GETHING	80	15/5	65	-	65	1000	65	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	CADOMIN	31	15/5	25	-	25	1060	27	
	TRIASSIC	6	15/5	5	-	5	1180	6	
	PERMO-PENN	3	20/5	2	-	2	1030	2	
SUFFIELD	MILK RIVER	32	25/5	23	5	18	960	17	SUPPLIES LOCAL UTILITY
SUNDRE	VIKING	6	20/10	4	-	4	1020	4	
	BLAIRMORE	8	15/10	6	-	6	1020	6	
	ELKTON ASSOCIATED	21	15/15	15	-4	19	1070	20	
	ELKTON SOLUTION	75	55/35	22	4	18	1100	20	GAS INJECTED INTO GAS CAP

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	(10) REMARKS
Sunset Lake	Blairmore	13	20/5	10	-	10	1000	10	Presently considered beyond economic reach
	Cadomin	7	10/5	6	-	6	1030	6	
Swalwell	Viking	3	20/5	2	-	2	1000	2	
	Mississippian	38	15/5	31	-	31	1100	34	
Swan Hills	Gething	1	10/5	1	-	1	1050	1	Gas sold to Northwestern Utilities, Limited
	Beaverhill Lake Solution	1300	55/60	240	7	233	1120	261	
Swan Hills South	Beaverhill Lake Solution	570	55/40	154	4	150	1120	168	Gas sold to Northwestern Utilities, Limited
Sylvan Lake	Viking	4	15/5	3	-	3	1010	3	Gas sold to Trans-Canada Pipe Lines Limited
	Blairmore	380	15/10	290	9	281	1100	309	
	Detrital	8	20/10	6	-	6	1100	7	
	Jurassic Associated and non-Associated	62	20/10	45	-	45	1020	46	
	Jurassic Solution	24	40/45	8	-	8	1100	9	
	Mississippian	100	20/10	75	2	73	1100	80	
	Mississippian Solution	42	40/40	15	-	15	1200	18	
	Leduc Associated	35	20/10	25	-	25	1020	26	
	Leduc Solution	14	35/45	5	-	5	1100	6	
Taber South	Bow Island	17	30/5	11	-	11	1000	11	Presently considered beyond economic reach
Tangent	Cadotte	14	30/5	9	-	9	1010	9	Presently considered beyond economic reach
	Gething	79	20/5	60	-	60	1000	60	
	Triassic	53	20/5	40	-	40	1180	47	
Tawatinaw	Mannville	14	25/5	10	-	10	1020	10	Presently considered beyond economic reach
	Devonian	1	30/5	1	-	1	1080	1	
Three Hills	Viking	2	15/5	2	-	2	1000	2	
	Blairmore	7	20/5	5	-	5	1000	5	
	Mississippian	4	20/10	3	-	3	1000	3	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Field or Area	Zone	Initial Gas in Place BCF	Losses Reservoir/Surface Per Cent	Initial Marketable Gas (BCF)	Marketable Gas Produced to Dec 31 1965 BCF	Remaining Marketable Gas to Dec 31 1965 BCF	Estimated Heating Value BTU per Cu. Ft.	Remaining Marketable Gas at 1000 BTU per Cu.Ft. BCF	Remarks
Three Hills Creek	Belly River	9	15/5	7	-	7	970	7	
	Viking	8	20/5	6	-	6	1000	6	
	Mississippian	210	10/10	170	12	158	1110*	175	Gas sold to Trans-Canada
	Leduc	10	20/15	7	-	7	1100	8	Pipe Lines Limited
Turin	Bow Island	13	20/5	10	-	10	970	10	Presently considered
	Basal Blairmore	35	10/5	30	-	30	1020	30	beyond economic reach
	Ellis	5	15/5	4	-	4	1070	4	
	Mississippian	3	15/10	2	-	2	1050	2	
Turner Valley	Mississippian								Gas sold to Canadian
	Associated	1500	10/70	410	277	133	1110	148	Western Natural Gas
	Mississippian								Company Limited and
	Solution	1400	45/55	350	275	75	1110	83	supplies local Utility
Twining	Basal Mannville	1	20/5	1	-	1	1120	1	Presently considered
	Mississippian	51	20/5	39	-	39	1100	43	beyond economic reach
Twining North	Mannville	7	20/5	5	-	5	1100	6	
	Mississippian								
	Associated	40	20/5	30	-	30	1110	33	
	Mississippian								
	Solution	16	40/15	8	-	8	1110	9	
Two Creek	Triassic	12	10/5	10	-	10	1090	11	Presently considered beyond economic reach
Usona	Blairmore	12	10/5	10	-	10	1110	11	Presently considered beyond economic reach
Verger	Bow Island	3	25/5	2	-	2	1100	2	
	Basal Colorado	7	25/5	5	1	4	1060	4	
	Basal Mannville	74	15/5	60	2	58	1050	61	Gas sold to Trans-Canada
	Mississippian	3	15/10	2	-	2	1070	2	Pipe Lines Limited
Viking-Kinsella	Viking	950	15/5	770	395	375	1000*	375	Gas sold to Northwestern
	Blairmore	79	20/5	60	13	47	1000	47	Utilities Limited and
	Devonian	18	20/5	14	4	10	990 *	10	supplies local Utility

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU.FT. BCF	(10) REMARKS
VIRGINIA HILLS	BLAIRMORE	9	10/5	8	-	8	1040	8	
	PERMIAN	20	15/10	15	-	15	1160	17	
	BEAVERHILL LAKE SOLUTION	220	60/60	36	2	34	1070	36	GAS SOLD TO NORTHWESTERN UTILITIES, LIMITED
	SLAVE POINT	3	25/20	2	-	2	1070	2	
WAINWRIGHT	VIKING	5	15/5	4	-	4	980	4	
	BLAIRMORE ASSOCIATED AND NON-ASSOCIATED	36	20/30	20	-	20	940	19	
WASKAHIGAN	DUNVEGAN	25	10/10	20	-	20	1100	22	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
WATERGLEN	BLAIRMORE	7	15/10	5	-	5	1100	6	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	LEDUC	49	15/20	33	-	33	1100	36	
WATERTON	MISSISSIPPIAN	2200	15/40	1130	87	1043	1040 *	1080	GAS SOLD TO ALBERTA & SOUTHERN GAS CO. LTD.
	DEVONIAN	270	20/30	150	15	135	1020	138	
WATTS	VIKING	3	20/5	2	1	1	1030 *	1	SUPPLIES LOCAL UTILITY
	MISSISSIPPIAN	1	20/5	1	-	1	1070	1	
WAYNE-ROSEDALE	BELLY RIVER	7	20/5	5	-	5	1000	5	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED, CANADIAN WESTERN NATURAL GAS COMPANY LIMITED AND SUPPLIES LOCAL UTILITY
	VIKING	220	15/5	180	14	166	1090 *	181	
	BLAIRMORE	270	15/5	220	20	200	1120 *	224	
WEST DRUMHELLER	BASAL BLAIRMORE	22	15/5	18	-	18	1100	20	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
	NISKU ASSOCIATED	9	10/15	7	-	7	1090	8	
WESTEROSE	BLAIRMORE	7	20/5	5	-	5	1020	5	
	LEDUC ASSOCIATED	130	10/20	90	-9	99	1070	106	GAS INJECTED INTO GAS CAP
	LEDUC SOLUTION	140	35/15	79	9	70	1100	77	
WESTEROSE SOUTH	WABAMUN	7	10/10	6	-	6	1090	7	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED AND ALBERTA & SOUTHERN GAS CO. LTD.
	LEDUC	1700	10/15	1300	240	1060	1070 *	1135	

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Westlock	Viking	310	15/5	250	22	228	1060 *	242	Gas sold to Canadian Industrial Gas & Oil Limited and supplies local Utility
	Basal Blairmore	4	20/5	3	-	3	1100	3	
West Prairie	Cadotte	18	10/5	15	-	15	1040	16	Presently considered beyond economic reach
	Bluesky	6	10/5	5	-	5	990	5	
Whitelaw	Gething	31	15/5	25	5	20	1020	20	Supplies local Utility
	Triassic	33	20/5	25	-	25	1090	27	
Wildcat Hills	Mississippian	810	15/20	550	60	490	1050 *	515	Gas sold to Alberta & Southern Gas Co. Ltd.
Wildhorse Creek	Mississippian	150	15/20	100	-	100	940	94	
Wildmere	Blairmore	37	20/5	28	9	19	960 *	18	Supplies local Utility
Wildunn Creek	Viking	35	25/5	25	2	23	1010	23	Gas sold to Trans-Canada Pipe Lines Limited
Willesden Green	Belly River	4	20/5	3	-	3	1000	3	
	Cardium	12	20/5	9	-	9	1100	10	
	Cardium Solution	260	65/35	59	-	59	1100	65	
	Basal Blairmore	20	10/15	15	-	15	1100	17	
Willingdon	Viking	3	25/5	2	-	2	980	2	Gas sold to Western Minerals Ltd. and supplies local Utility
	Mannville	15	25/5	11	2	9	990	9	
	Leduc	11	10/5	9	6	3	1000 *	3	
Wilson Creek	Pekisko	23	10/5	20	-	20	1090	22	Presently considered beyond economic reach
	Banff	18	10/5	15	-	15	1080	16	
Wimborne	Viking	1	25/5	1	-	1	1020	1	
	Mississippian	1	10/10	1	-	1	1100	1	
	Nisku	3	20/15	2	-	2	1160	2	
	Nisku Solution	5	30/45	2	-	2	1160	2	
	Leduc Associated	320	10/30	200	7	193	1000	193	Gas sold to Trans-Canada Pipe Lines Limited
	Leduc Solution	110	50/45	30	-	30	1000	30	

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
WINDFALL	VIKING	13	25/5	9	-	9	1030	9	GAS SOLD TO ALBERTA & SOUTHERN GAS CO. LTD. PRESSURE MAINTAINED BY PINE CREEK GAS
	MISSISSIPPIAN	5	15/5	4	2	2	1040	2	
	LEDUC	820	10/35	480	30	450	1080*	486	
WINNIFRED	BOW ISLAND	16	20/5	12	-	12	1000	12	
WINTERING HILLS	BELLY RIVER	2	25/5	1	-	1	980	1	
	VIKING	5	20/5	4	-	4	1010	4	
	BLAIRMORE	6	15/5	5	-	5	1030	5	
WIZARD LAKE	BELLY RIVER	1	25/5	1	-	1	1050	1	
	VIKING	1	15/10	1	-	1	1070	1	GAS SOLD TO NORTHWESTERN UTILITIES, LIMITED
	BLAIRMORE	15	20/15	10	10	<1	1120	<1	
	LEDUC SOLUTION	230	40/25	105	15	90	1250	112	
WOKING	PEACE RIVER	5	10/5	4	-	4	1040	4	SUPPLIES LOCAL UTILITY
	SPIRIT RIVER	3	20/5	2	-	2	1040	2	
	BLUESKY	4	20/5	3	-	3	1040	3	
	PERMO-PENN	3	20/5	2	-	2	1060	2	
	MISSISSIPPIAN	3	25/5	2	-	2	1070	2	
WOLF LAKE	CADOMIN	13	10/5	11	-	11	1060	12	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH
WOOD RIVER	BASAL BLAIRMORE	72	10/10	34	5	29	1090*	32	GAS SOLD TO TRANS-CANADA PIPE LINES LIMITED
WORSLEY	LEDUC	300	20/5	230	38	192	1070	207	GAS SOLD TO WESTCOAST TRANSMISSION COMPANY LIMITED AND SUPPLIES LOCAL UTILITY
ZAMA LAKE	ELK POINT	16	20/5	12	-	12	1110	13	PRESENTLY CONSIDERED BEYOND ECONOMIC REACH

(1) FIELD OR AREA	(2) ZONE	(3) INITIAL GAS IN PLACE BCF	(4) LOSSES RESERVOIR/SURFACE PER CENT	(5) INITIAL MARKETABLE GAS (BCF)	(6) MARKETABLE GAS PRODUCED TO DEC 31 1965 BCF	(7) REMAINING MARKETABLE GAS TO DEC 31 1965 BCF	(8) ESTIMATED HEATING VALUE BTU PER CU. FT.	(9) REMAINING MARKETABLE GAS AT 1000 BTU PER CU. FT. BCF	(10) REMARKS
	SUB-TOTAL			41,866	5,399	36,467		38,944	
OTHER RESERVES									
	LESS THAN 10 BCF			884	-	884		948	
	CONFIDENTIAL POOLS			210	—	210		226	
TOTAL RESERVES, DECEMBER 31, 1965				42,960	5,399	37,561		40,118	
TOTAL RESERVES WITHIN ECONOMIC REACH				39,196	5,399	33,797		36,151	
TOTAL RESERVES BEYOND ECONOMIC REACH				3,764	-	3,764		3,967	
				42,960	5,399	37,561		40,118	

* MEASURED HIGHER HEATING VALUE

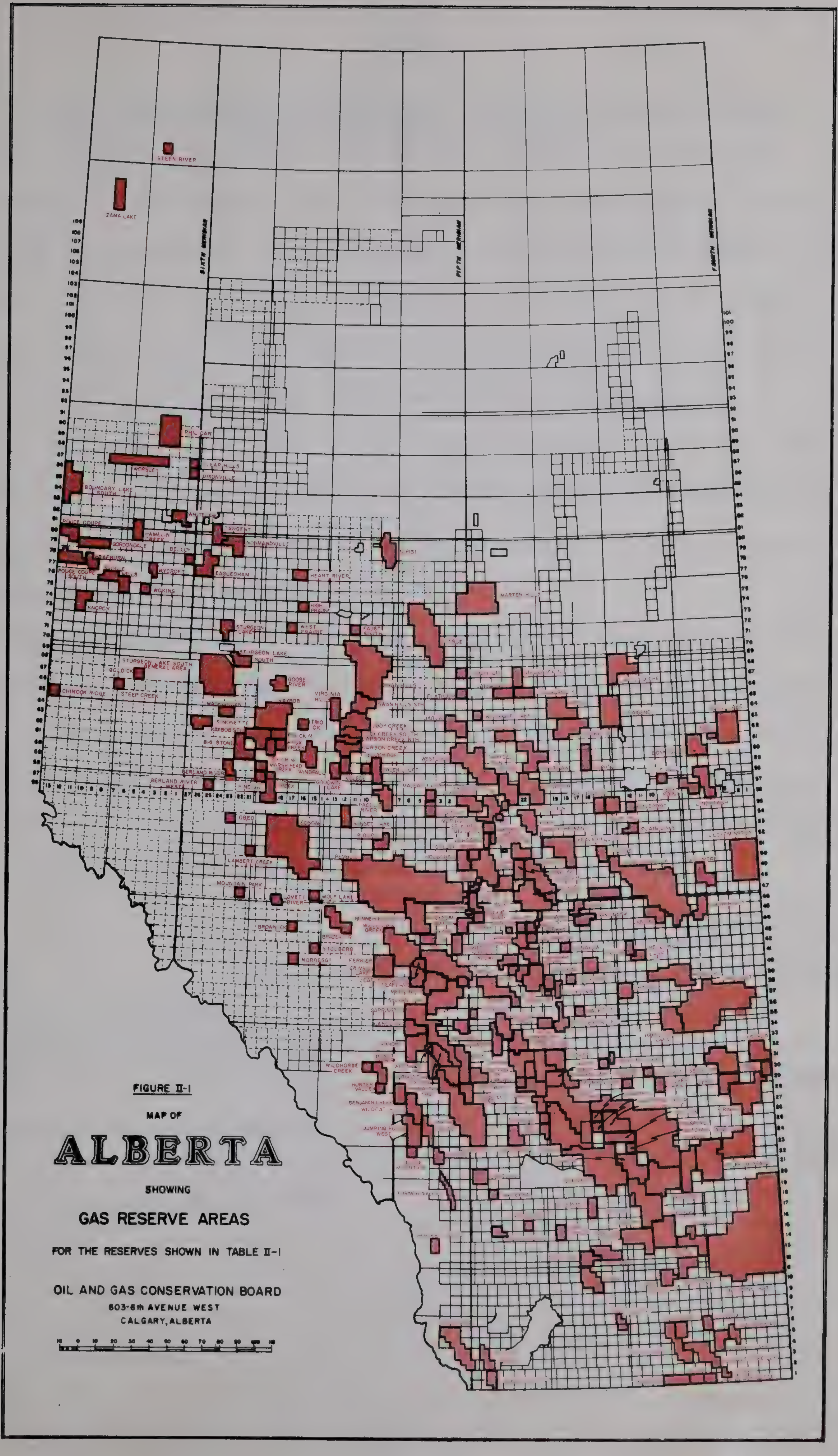

FIGURE II-1

MAP OF

ALBERTA

SHOWING

GAS RESERVE AREAS

FOR THE RESERVES SHOWN IN TABLE II-1

OIL AND GAS CONSERVATION BOARD
603-6th AVENUE WEST
CALGARY, ALBERTA

III THE ESTABLISHED RESERVES OF NATURAL GAS LIQUIDS IN THE PROVINCE OF ALBERTA

Natural gas liquids are defined in The Oil and Gas Conservation Act as "propane, butanes or pentanes plus, or a combination of them, obtained from the processing of raw gas or condensate." For the purposes of this report, condensate recovered in stock tanks and marketed without processing is included in the reserves of pentanes plus and hence natural gas liquids. Also included in the pentanes plus category are higher vapour pressure products containing substantial quantities of butanes that are recovered at several plants throughout the Province.

The Board estimates the remaining established recoverable reserves of natural gas liquids in the Province as of December 31, 1965 to be some 1,261 million barrels. This represents an increase in remaining reserves of about 171 million barrels since December 31, 1964. A summary of the reserves and of the changes during the last year are given in the following tabulation.

	Millions of Barrels			
	Propane	Butanes	Pentanes Plus	Total
Remaining Established Recoverable Natural Gas Liquids at December 31, 1964	329.2	211.1	549.7	1,090.0
Addition to Reserves during 1965	36.4	28.6	177.0	242.0
Natural Gas Liquids Produced during 1965	9.4	6.1	55.4	70.9

	Millions of Barrels			
	Propane	Butanes	Pentanes Plus	Total
Remaining Established Recoverable Natural Gas Liquids at December 31, 1965	356.2	233.6	671.3	1,261.1

The reserves of natural gas liquids consist of liquids estimated to be recoverable from the Province's established gas reserves by processing to the extent that facilities have already been installed, or where processing facilities are not yet in operation, to the extent that the Board has knowledge of plans for the installation of such facilities, or to the extent that facilities will be necessary to render the gas marketable.

The estimates have been prepared by applying the average liquid recovery ratio to the remaining established marketable reserves of that pool. The average liquid recovery ratios have been estimated on the basis of history wherever fields have been producing for a reasonable length of time. Where plants are in the planning or construction stage or have been operating for only a short time, the rates have been based on submissions presented to the Board in support of applications under Section 38 of The Oil and Gas Conservation Act, or on the Board's general knowledge of plans for future processing plants in the Province. Changes in the composition of gas being processed and the recoveries expected from any particular pool have been based on the available reservoir fluid studies.

The increase in propane and butanes reserves during 1965 results from the expected addition of fractionation facilities to process the gas reserves connected to the Carstairs plant, from an increase in gas reserves for several fields and from expected increases in recoveries from other fields. The increase in pentanes plus reserves may be attributed mainly to the development of the Gold Creek area reserves and to increases in recoveries from certain other fields.

The more significant changes in the 1965 estimate of remaining recoverable reserves occurred in the following plants or areas.

Plant or Area	Board's Estimate as of Dec. 31, 1964	Board's Estimate as of Dec. 31, 1965	Change	Remarks
	(Millions of Barrels)			
Propane				
Carstairs	-	21.7	+21.7	Installation of propane recovery facilities
Nevis	3.8	8.6	+4.8	Increase in gas reserves and in propane recovery ratio
Pembina	26.6	34.3	+7.7	Increase in gas reserves
Rimbey	37.8	40.2	+2.4	Increase in propane recovery ratio
Empress	95.0	85.0	-10.0	Decrease in propane recovery ratio
Butanes				
Carstairs	-	17.8	+17.8	Installation of butanes recovery facilities
Nevis	3.7	5.8	+2.1	Increase in gas reserves and in butanes recovery ratio

Plant or Area	Board's Estimate as of Dec. 31, 1964	Board's Estimate as of Dec. 31, 1965	Change	Remarks
	(Millions of Barrels)			
Butanes (Cont'd)				
Pembina	22.0	28.4	+6.4	Increase in gas reserves
Rimbey	26.7	30.4	+3.7	Increase in butanes recovery ratio
Empress	49.0	45.0	-4.0	Decrease in butanes recovery ratio
Pentanes Plus				
Carstairs	43.7	32.4	-11.3	Decrease in pentanes plus recovery ratio
Edson	15.0	17.0	+2.0	Increase in gas reserves
Pembina	22.6	29.0	+6.4	Increase in gas reserves
Turner Valley	4.8	7.1	+2.3	Increase in pentanes plus recovery ratio
Waterton	50.2	58.3	+8.1	Increase in pentanes plus recovery ratio
Empress	11.0	15.0	+4.0	Increase in pentanes plus recovery ratio

Details of the Board's current estimate of the established reserves of natural gas liquids are presented in Table III-1. The table does not show individually fields having reserves of less than five million barrels or those in confidential pools but the sum of these reserves is included under "Other Reserves" and in the Provincial total.

The Board recognizes that additional natural gas liquids could be recovered from the currently established reserves of gas. However, it has not in this report attempted to estimate the additional recoverable reserves nor the particular sources from which they may come.

TABLE 111-1

ESTABLISHED RESERVES OF NATURAL GAS LIQUIDS IN THE PROVINCE OF ALBERTA, DECEMBER 31, 1965

(1)	(2)	(3)	(4)	(5)			(6)			
				LIQUID RECOVERY RATIOS BBLS/MMCF (MARKETABLE GAS)			RECOVERABLE LIQUIDS MILLIONS OF BARRELS			
PLANT	FIELD OR AREA	ZONE	REMAINING MARKETABLE RESERVES OF NATURAL GAS - BCF	PROPANE	BUTANES	PENTANES PLUS	PROPANE	BUTANES	PENTANES PLUS	TOTAL
BONNIE GLEN	BONNIE GLEN	LEDUC	546	28.0	21.0	19.0	15.3	11.5	10.4	37.2
	GLEN PARK	LEDUC	8	24.0	18.0	20.0	0.2	0.1	0.2	0.5
	WIZARD LAKE	LEDUC	90	26.0	20.0	20.0	2.3	1.8	1.8	5.9
							17.8	13.4	12.4	43.6
CALGARY (1)	CROSSFIELD	CALGARY MISSISSIPPIAN & BLAIRMORE	612	11.0	10.0	29.0	6.7	6.1	17.7	30.5
		CALGARY WABAMUN	641	0.5	0.5	4.0	0.3	0.3	2.6	3.2
							7.0	6.4	20.3	33.7
CARSON CREEK	CARSON CREEK	BEAVERHILL LAKE	233	23.0	21.0	55.0	5.4	4.9	12.8	23.1
	CARSON CREEK NORTH	BEAVERHILL LAKE	157	37.0	30.0	25.0	5.8	4.7	3.9	14.4
							11.2	9.6	16.7	37.5
CARSTAIRS (1)	CARSTAIRS	MISSISSIPPIAN	702	14.0	11.0	20.0	9.8	7.7	14.0	31.5
	CROSSFIELD	CROSSFIELD MISSISSIPPIAN	918	13.0	11.0	20.0	11.9	10.1	18.4	40.4
							21.7	17.8	32.4	71.9
EDSON	EDSON	MISSISSIPPIAN	1,697			10.0			17.0	17.0
GILBY (2)	GILBY	BLAIRMORE & JURASSIC	381			10.0			3.8	3.8
		PEKISKO	269			15.0			4.0	4.0
									7.8	7.8
HARMATTAN-ELKTON (3)	HARMATTAN-ELKTON	MISSISSIPPIAN	1,036	13.0	10.0	33.0	13.5	10.4	34.2	58.1
		LEDUC	150			6.0			0.9	0.9

PLANT	FIELD OR AREA	ZONE	REMAINING MARKETABLE RESERVES OF NATURAL GAS - MCF	LIQUID RECOVERY RATIOS BBLS/MMCF (MARKETABLE GAS)			RECOVERABLE LIQUIDS MILLIONS OF BARRELS			
				PROPANE	BUTANES	PENTANES PLUS	PROPANE	BUTANES	PENTANES PLUS	TOTAL
	HARMATTAN EAST	MISSISSIPPIAN	997	23.0	16.0	42.0	22.9	16.0	41.9	80.8
							36.4	26.4	77.0	139.8
HUSSAR (1)	HUSSAR	COLORADO & BLAIRMORE	442	10.0	6.0	4.0	4.4	2.7	1.8	8.9
JUDY CREEK (4)	JUDY CREEK	BEAVERHILL LAKE	231	60.0	32.0	16.0	13.9	7.4	3.7	25.0
	SWAN HILLS & SWAN HILLS SOUTH	BEAVERHILL LAKE	383	70.0	43.0	22.0	26.8	16.5	8.4	51.7
	VIRGINIA HILLS	BEAVERHILL LAKE	34	75.0	42.0	20.0	2.6	1.4	0.7	4.7
							43.3	25.3	12.8	81.4
JUMPING POUND	JUMPING POUND	MISSISSIPPIAN	327			8.0			2.6	2.6
	SARCEE	MISSISSIPPIAN	127			14.0			1.8	1.8
	JUMPING POUND WEST	MISSISSIPPIAN	700			18.0			12.6	12.6
									17.0	17.0
LEDUC-WOODBEND	LEDUC-WOODBEND	NISKU & LEDUC	390	40.0	20.0	13.0	15.6	7.8	5.1	28.5
	GOLDEN SPIKE	NISKU & LEDUC	91	50.0	30.0	20.0	4.6	2.7	1.8	9.1
							20.2	10.5	6.9	37.6
LOOKOUT BUTTE	LOOKOUT BUTTE	MISSISSIPPIAN	400			50.0			20.0	20.0
MINNEHIK-BUCK LAKE	MINNEHIK-BUCK LAKE	MISSISSIPPIAN	369			18.0			6.6	6.6
NEVIS (1)	NEVIS	DEVONIAN	564	6.0	5.0	18.0	3.4	2.8	10.1	16.3
	STETTLER	NISKU & LEDUC	7	93.0	46.0	18.0	0.7	0.3	0.1	1.1
	FENN - BIG VALLEY	NISKU & LEDUC	49	71.0	41.0	17.0	3.5	2.0	0.8	6.3
	HACKETT	BLAIRMORE	47	13.0	11.0	7.0	0.6	0.5	0.3	1.4
	ERSKINE	BLAIRMORE	16	11.0	8.0	6.0	0.2	0.1	0.1	0.4
	RICH	BLAIRMORE	12	14.0	11.0	6.0	0.2	0.1	0.1	0.4
							8.6	5.8	11.5	25.9
OLDS	OLDS	WABAMUN	238			53.0			12.6	12.6

(1)	(2)	(3)	(4)	(5)			(6)			
PLANT	FIELD OR AREA	ZONE	REMAINING MARKETABLE RESERVES OF NATURAL GAS - MCF	LIQUID RECOVERY RATIOS BBLS/MMCF (MARKETABLE GAS)			RECOVERABLE LIQUIDS MILLIONS OF BARRELS			
				PROPANE	BUTANES	PENTANES PLUS	PROPANE	BUTANES	PENTANES PLUS	TOTAL
PEMBINA [3]	PEMBINA	BLAIRMORE	184			8.0			1.5	1.5
		CARDUIM	981	35.0	29.0	28.0	34.3	28.4	27.5	90.2
							34.3	28.4	29.0	91.7
PINCHER CREEK	PINCHER CREEK	MISSISSIPPIAN	309	6.0	6.0	28.0	1.9	1.9	7.1	10.9
REDWATER	REDWATER	LEDUC	40	120.0	80.0	40.0	4.8	3.2	1.6	9.6
RIMBEY	HOMEGLEN-RIMBEY	LEDUC	645	18.0	16.0	29.0	11.6	10.3	18.7	40.6
	WESTEROSE SOUTH	LEDUC	1,060	27.0	19.0	39.0	28.6	20.1	41.3	90.0
							40.2	30.4	60.0	130.6
-	SIMONETTE	CADOMIN	15			4.0			0.1	0.1
		WABAMUN	80			40.0			3.2	3.2
		LEDUC	81			25.0			2.0	2.0
									5.3	5.3
SYLVAN LAKE [1]	SYLVAN LAKE	BLAIRMORE & JURASSIC	334			14.0			4.7	4.7
		MISSISSIPPIAN & LEDUC	118			19.0			2.2	2.2
	MEDICINE RIVER	BLAIRMORE & JURASSIC	193			8.0			1.5	1.5
		MISSISSIPPIAN & LEDUC	29			16.0			0.5	0.5
									8.9	8.9
TURNER VALLEY	TURNER VALLEY	MISSISSIPPIAN	208	14.0		34.0	2.9		7.1	10.0
WATERTON	WATERTON	MISSISSIPPIAN	1,043			55.0			57.4	57.4
		DEVONIAN	135			7.0			0.9	0.9
									58.3	58.3
WEST WHITECOURT	WINDFALL	LEDUC	450			120.0			54.0	54.0
WIMBORNE	WIMBORNE	LEDUC	223			35.0			7.8	7.8

(1)	(2)	(3)	(4)	(5)			(6)			
PLANT	FIELD OR AREA	ZONE	REMAINING MARKETABLE RESERVES OF NATURAL GAS – MCF	LIQUID RECOVERY RATIOS BBLS/MMCF (MARKETABLE GAS)			RECOVERABLE LIQUIDS MILLIONS OF BARRELS			
				PROPANE	BUTANES	PENTANES PLUS	PROPANE	BUTANES	PENTANES PLUS	TOTAL
WORSLEY	WORSLEY	LEDUC	192	6.0	4.0	17.0	1.2	0.8	3.3	5.3
SUB TOTAL							255.9	182.6	515.2	958.7
OTHER RESERVES (5)										
	CONFIDENTIAL POOLS						--	—	81.7	81.7
	SMALL FIELDS						4.3	3.0	48.3	55.6
	SMALL FIELDS PRESENTLY BEYOND ECONOMIC REACH						—	--	10.6	10.6
	EDMONTON	GAS RE-PROCESSING					11.0	3.0	0.5	14.5
	EMPRESS	GAS RE-PROCESSING					85.0	45.0	15.0	145.0
TOTAL							356.2	233.6	671.3	1261.1

(1) PROCESSING CARRIED OUT IN TWO SEPARATE PLANTS.

(2) PROCESSING CARRIED OUT IN SIX SEPARATE PLANTS.

(3) PROCESSING CARRIED OUT IN THREE SEPARATE PLANTS.

(4) PRODUCTS ARE RECOVERED AT LEDUC-WOODBEND PLANT.

(5) INCLUDES RESERVES IN THOSE POOLS CLASSED AS CONFIDENTIAL, ALL FIELDS AND OTHER AREAS WHERE RECOVERABLE LIQUID RESERVES ARE ESTIMATED AT LESS THAN FIVE MILLION BARRELS, PLUS RESERVES RECOVERABLE BY THE RE-PROCESSING OF PIPE LINE GAS.

IV THE ESTABLISHED RESERVES OF SULPHUR IN THE PROVINCE OF ALBERTA

The Board estimates the remaining established recoverable reserves of sulphur in the Province as of December 31, 1965 to be some 99 million long tons. This represents an increase of some 24 million long tons since December 31, 1964.

Details of the reserves are given in the following tabulation.

	Millions of Long Tons
Remaining Established Recoverable Reserves of Sulphur at December 31, 1964	75.4
Increase in Reserves during 1965	25.2
Sulphur Produced during 1965	1.5
Remaining Established Recoverable Reserves of Sulphur at December 31, 1965	99.1

The most significant changes during 1965 occurred in the plants or areas shown below.

	Board's Estimate as of			
Plant or Area	Dec. 31, 1964 (Millions of Long Tons)	Dec. 31, 1965	Change	Remarks
Calgary	13.5	15.2	+1.7	Increase in gas reserves
Crossfield East	3.9	11.9	+8.0	Increase in gas reserves
Harmattan-Elkton	1.6	7.1	+5.5	Increase in gas reserves
Panther River	3.2	9.6	+6.4	Increase in gas reserves
West Whitecourt	10.2	9.1	-1.1	Decrease in gas reserves in Pine Creek Field

The established recoverable reserves of sulphur are defined as those reserves in fields from which sulphur is currently being recovered or where, in the opinion of the Board, sulphur will be recovered in the future. Table IV-1 is a list of individual fields with established reserves of greater than one million long tons. Reserves in smaller fields or in confidential pools are not listed individually but are included in the Provincial total.

The table has been prepared by applying the appropriate hydrogen sulphide content and recovery efficiency to the remaining established recoverable reserves of gas in each pool. Where sulphur is currently being recovered, the recovery efficiency is as specified in the plant approval or, where not specified, it is based upon plant experience. Where sulphur is expected to be produced in the future, the recovery efficiency has been estimated at 90 per cent.

The remaining recoverable reserve of 99 million long tons of sulphur shown in Table IV-1 does not include some four million long tons of sulphur expected to be recovered in conjunction with the approved scheme of Great Canadian Oil Sands for the processing of the oil sands in its lease in the Fort McMurray Area.

TABLE IV-1

ESTABLISHED RESERVES OF SULPHUR IN THE PROVINCE OF ALBERTA, DECEMBER 31, 1965

(1) PLANT	(2) FIELD OR AREA	(3) ZONE	(4) REMAINING RECOVERABLE RAW GAS BCF	(5) HYDROGEN SULPHIDE CONTENT OF RAW GAS PER CENT	(6) RECOVERY EFFICIENCY PER CENT	(7) REMAINING RECOVERABLE SULPHUR 1000 LONG TONS
--	BERLAND RIVER	LEDUC	400	15.4	90.0	2,085
--	BIGSTONE	LEDUC	333	12.2	90.0	1,375
COLEMAN	SAVANNA CREEK	MISSISSIPPIAN	509	15.0	93.0	2,679
CALGARY	CROSSFIELD	CALGARY MISSISSIPPIAN & BLAIRMORE	638	1.0	94.0	225
	CROSSFIELD	CALGARY WABAMUN	1282	33.0	94.0	14,953
						15,178
--	CROSSFIELD EAST	WABAMUN	925	38.0	90.0	11,895
EDSON	EDSON	MISSISSIPPIAN	1996	2.1	93.0	1,466
--	HARMATTAN-ELKTON	MISSISSIPPIAN	1238	0.7	90.0	293
	HARMATTAN-ELKTON	LEDUC	375	53.4	90.0	6,776
						7,069
JUMPING POUND	JUMPING POUND	MISSISSIPPIAN	385	3.0	95.0	413
	JUMPING POUND WEST	MISSISSIPPIAN	875	5.3	95.0	1,652
	SARCEE	MISSISSIPPIAN	149	5.0	95.0	266
						2,331
NEVIS (1)	FENN-BIG VALLEY	NISKU & LEDUC	76	3.0	93.0	80
	NEVIS	DEVONIAN	664	7.0	93.0	1,625
	STETTLER	NISKU & LEDUC	13	3.5	93.0	16
						1,721
OKOTOKS	OKOTOKS	WABAMUN	298	34.0	95.0	3,619
--	PANTHER RIVER (2)	WABAMUN	214	68.0	90.0	4,924
	PANTHER RIVER (2)	NISKU	160	87.0	90.0	4,711
						9,635

(1) PLANT	(2) FIELD OR AREA	(3) ZONE	(4) REMAINING RECOVERABLE RAW GAS BCF	(5) HYDROGEN SULPHIDE CONTENT OF RAW GAS PER CENT	(6) RECOVERY EFFICIENCY PER CENT	(7) REMAINING RECOVERABLE SULPHUR 1000 LONG TONS
PINCHER CREEK	PINCHER CREEK	MISSISSIPPIAN	412	10.5	90.0	1,464
RIMBEY	HOMEGLEN-RIMBEY	LEDUC	759	3.3	90.0	848
	WESTEROSE-SOUTH	LEDUC	1247	1.4	90.0	591
						1,439
--	SIMONETTE (2)	WABAMUN	123	18.0	90.0	749
--	SIMONETTE (2)	LEDUC	147	16.0	90.0	796
						1,545
WATERTON	WATERTON	MISSISSIPPIAN	1738	25.0	94.0	15,357
	WATERTON	DEVONIAN	193	18.0	94.0	1,228
						16,585
WEST WHITECOURT	PINE CREEK	WABAMUN	176	35.0	93.0	2,154
	PINE CREEK	LEDUC	354	26.0	93.0	3,218
	WINDFALL	LEDUC	692	15.6	93.0	3,775
						9,147
WIMBORNE	WIMBORNE	LEDUC	330	15.0	93.0	1,731
SUB-TOTAL						90,955
	CONFIDENTIAL POOLS					2,983
	OTHER FIELDS (3)					4,669
	OTHER FIELDS PRESENTLY BEYOND ECONOMIC REACH (3)					475
TOTAL						99,082

(1) PROCESSING CARRIED OUT IN TWO SEPARATE PLANTS.

(2) PRESENTLY CONSIDERED BEYOND ECONOMIC REACH.

(3) FIELD AND AREAS HAVING SULPHUR RESERVES OF UNDER 1,000,000 LONG TONS.

V TRENDS IN EXPLORATORY DRILLING AND IN THE GROWTH OF CRUDE OIL AND GAS RESERVES IN THE PROVINCE OF ALBERTA

Introduction

The analysis presented in this section relates to the overall growth in reserves of oil and gas, the anticipated appreciation of currently established reserves and includes some reference to the estimation of ultimate reserves.

Method of Analysis

1. Appreciation of Established Reserves

The trends section of previous reserve reports exhibited several differences of treatment as between oil and gas, including the date of reserve reference, classification of reserves by pool or formation and the use of moving averages to smooth appreciation data.

Prior to preparing this year's report, the Board decided to review the method of analysis of oil and gas reserves, with the objective of examining differences of treatment and eliminating those believed to be unnecessary.

In accordance with this objective, the reference date for both gas and oil reserves has been standardized as the end of the discovery year. The manner of application of appreciation factors to established reserves is now the same, with the elimination of the averaging of certain reserve values from the oil analysis. The possibility of introducing uniformity of classification by listing gas reserves on a pool basis to conform with oil is still under study by the Board.

Generally, estimates of future appreciation of established reserves for both gas and oil have been computed by establishing trends in appreciation as a function of years since the discovery year and applying the appropriate factors so obtained to the current estimates of proved reserves.

2. Ultimate Reserves

There are two general methods commonly used in estimating the ultimate reserves potential of gas or crude oil in an area: the geological or volume of sediments method and the statistical method.

In the geological method, an estimate is made of the volume of sediments favourable to the accumulation of oil or gas, to which an estimated ultimate reserve of oil or gas per unit of sediment is applied. The reserve per unit of sediment is based on evidence obtained from areas that are geologically similar, but have experienced substantially more extensive exploration than the area under investigation. The method is useful primarily in estimating ultimate reserves for a relatively large area. Its reliability depends on the validity of the assumption that evidence related to one area may be applied to another.

The statistical method concerns the numerical analysis of reserve data in a particular area. Frequently, this approach involves the determination of reserves discovered per exploratory well or footage drilled.

The Board has also given consideration to the direct extrapolation of the historical trend in the growth of established reserves.

Exploratory Wells

The Board employs the Lahee system of well classification utilized by the American Association of Petroleum Geologists and by the Alberta Society of Petroleum Geologists. However, the Board excludes outpost wells from its definition of exploratory wells. The category of total exploratory wells as used in this report comprises

(a) new field wildcats,

(b) new pool wildcats,

(c) shallower pool tests, and

(d) deeper pool tests.

Totals of the exploratory wells drilled each year are presented graphically in Figure V-1 for the period 1947 through 1965. Cumulative exploratory wells drilled to the end of 1965 total 7,557. As discussed in several earlier reports, the Board believes that an ultimate density of one exploratory well per ten square miles of prospective area is reasonable, and consequently about 20,000 exploratory wells will eventually be drilled in Alberta.

Trends in the Growth of Oil Reserves

Table V-1 lists for each year from 1946 the number of exploratory wells drilled, the major oil pools discovered (essentially those of reserves of over five million barrels) and the December 31, 1965 estimate of the initial proved reserves discovered. The number of exploratory wells and the reserves are given both for the year and as cumulative figures to the year end. The reserve figures correspond to those presented in Table I-1.

Figure V-2 is a graphical presentation of the December 31, 1965 reserve data and the corresponding previous Board estimates of reserves. The long term growth of proved initial crude oil reserves due both to new discoveries and appreciation of known reserves has been some 370 million stock tank barrels per year, as illustrated by the red line in Figure V-2. The spread on Figure V-2 between any two points for a particular year represents the change during the period in the Board estimates of reserves discovered to the end of that year. This change is largely due to appreciation.

It is to be noted that in recent years the actual growth in proved initial reserves has been at a rate well above the long term average. The actual overall growth in proved initial reserves of crude oil was 430 million barrels during the past year and has averaged 1,300 million barrels per year over the past two years, 720 million barrels per year over the last five years, and 513 million barrels per year over the past ten years. Much of this recent growth is attributable to the application of enhanced recovery methods.

The exploratory drilling and proved initial crude oil reserves data of Table V-1 are summarized by year of discovery in Table V-2. In addition, the table shows the proved initial crude oil reserves (as estimated by the Board as of December 31, 1965) per exploratory well drilled for each year and on a cumulative basis. The trend in the growth in oil reserves per exploratory well is presented graphically as the solid lines in Figure V-4.

Figure V-4 illustrates the erratic year by year record of reserves growth per exploratory well and the more consistent trend in the cumulative figures. The fact that recently discovered reserves will undergo significant appreciation both through development and the institution of enhanced recovery methods must be kept in mind in interpreting the trends. Nevertheless, it would appear that both the annual and the cumulative curves show a trend toward somewhat decreased reserves per exploratory well.

In order to obtain a measure of the appreciation which may be expected in recently discovered reserves, an analysis was made of the year by year appreciation of 86 individual pools, containing some 95 per cent of the initial proved reserves, grouped by year of discovery as indicated in Table V-1. The appreciation was measured by the ratio of the year end reserve estimate at any time to the reserve as estimated at the end of the discovery year. The data are presented in Figure V-3 as separate lines for each year-of-discovery group. The appreciation lines for the different groups of pools vary widely as is to be expected. The 1955 and 1956 pools have appreciated only modestly while the 1948 and 1958 pools have undergone tremendous growth. This great variation is due partly to the nature of the pools themselves but more to the vagaries of timing of their discovery and particularly to whether they were discovered near the beginning or near the end of the discovery year. Clearly pools discovered near the end of the discovery year would undergo much greater relative appreciation in future years. Notwithstanding the great variation in the individual group lines, it is possible to arrive at an average or normal trend. This has been done by calculating the reserve-weighted average of the ratios for all the year groups at each year after discovery and drawing a smooth curve through the average points. The smooth curve is shown as the red line labelled Normal Appreciation on Figure V-3. This line indicates that "normally" a reserve might be expected to appreciate six-fold after three years, 10-fold after nine years, and 11-fold after 15 years. While actual cases are bound to vary widely from the normal curve (as do the groups of pools discovered in 1955, 1956, 1948, 1958), the Board believes that, used with understanding and caution, the normal appreciation curve may be helpful in assessing the real meaning of the trends in the growth of reserves.

The above procedure for estimating the appreciation of crude oil reserves differs considerably from that utilized in the Board's report of reserves of the Province as of December 31, 1964. The principal differences are that the procedure for determining the appreciation curve has been simplified and the dampening effects of using a three-year moving average and applying the appreciation factors to averages of recent reserve estimates for each of the particular discovery years have been eliminated. As a consequence of giving additional weight to the substantial appreciation indicated in the year following the discovery year, the appreciation factors applied to pools discovered in the last three years have been increased over those resulting from the previous procedure.

To facilitate the use of the normal appreciation curve, a second scale has been constructed on the right-hand side of Figure V-3. This scale permits the "normal appreciation factor" to be read directly from the normal appreciation line. The factor is defined as the number by which a reserve estimate made a given number of years after the discovery year should be multiplied to obtain an estimate of the fully appreciated reserve.

The appreciation factor is applied in Table V-3 to the pools grouped by year of discovery. Column 6 of this table gives the annual appreciated initial proved reserves determined by multiplying the December 31, 1965 estimate for the various year groups by the appropriate normal appreciation factor. In column 7, the appreciated initial reserve figures given in column 6 are cumulated. The table also gives the appreciated reserves per exploratory well on both an annual and a cumulative basis. These latter figures are plotted as the dashed lines in Figure V-4 where they give some measure of the significance of reserve appreciation on the trend of the annual and cumulative reserve discoveries per exploratory well.

These figures suggest that the initial proved reserves estimated as of December 31, 1965 at 8.1 billion barrels may be expected to appreciate to about 11 billion barrels by the time all the pools are fully developed and enhanced recovery operations are implemented where appropriate.

It should be noted that, since the trends in reserve growth and appreciation are both based upon the historical record, they represent a technology changing at the rate of the recent past. When applied to the future, they indirectly incorporate the assumption of a similarly changing technology. Also, the estimates assume the normal appreciation derived from the average of several year groups. This will probably lead to reasonable cumulative figures but the annual figures for recent years could be significantly in error.

Ultimate Reserves

The Board has made several estimates of the ultimate initial proved reserves of conventional crude oil in Alberta. It has projected the long term growth rate of 370 million barrels per year on a declining basis over some 30 years and projected the cumulative appreciated reserves discovered per exploratory well, also on a declining basis, to a total of some 20,000 exploratory wells. In addition, the Board's Geological Department has made estimates based upon the volume of favourable sediments and average accumulation factors. None of these approaches provides a reliable or definite estimate but they suggest that the ultimate initial proved reserves of Alberta will be of the order of 18 billion barrels as compared with the estimate of 14 to 16 billion barrels interpreted by the Board in its report of the reserves of the Province to the 1964 year end.

Trends in the Growth of Gas Reserves

The currently estimated initial marketable gas reserves, shown in Section II, are tabulated in Table V-4 by year of discovery. In this table, the names of fields, pools or areas having reserves of 10 billion cubic feet or over are listed by year of discovery, together with the annual number of exploratory wells drilled and the Board's present estimate of the initial marketable reserves discovered in each year. The number of exploratory wells and the reserves are given both for the year and as cumulative figures to the year end.

Figure V-5 is a graphical presentation of these data and of similar data for previous Board reserve estimates. As indicated by the dashed line on Figure V-5, the long term growth of initial marketable gas reserves due both to new discoveries and to appreciation of known reserves has been about 2.5 trillion cubic feet per year. The spread on Figure V-5 between any two points for a particular year represents the amount of appreciation of reserves discovered to the end of that year that has taken place during the period between successive Board estimates.

The actual growth in initial gas reserves has been 3.3 trillion cubic feet over the past year, has averaged 3.2 trillion cubic feet per year over the past two years, 2.0 trillion cubic feet per year over the past five years and 2.6 trillion cubic feet per year over the past ten years, the latter number being close to the value for the long term trend as shown in Figure V-5.

The exploratory drilling and initial gas reserve data of Table V-4 are summarized by year of discovery in Table V-5. In addition, the table shows the reserves as estimated at December 31, 1965 per exploratory well drilled calculated on an annual basis and on a cumulative basis. The reserves per exploratory well drilled are also presented graphically on both an annual and cumulative basis as part of Figure V-7.

As in previous reports, the appreciation of gas reserves in the years following discovery has been analysed in order to estimate the future appreciation of recent discoveries. The method adopted involves determining the ratio of increase in estimated initial gas reserves as a function of time elapsed from the end of the discovery year to the date of subsequent reserve determination. As mentioned in the introduction, this constitutes a change from the method used previously, which referred the reserve growth to the mid-point of the year following the discovery year. This alteration in the initial reference point, by lowering the reserve base to which the appreciation factors are applied, has resulted in a significant change in the level of appreciation factors and the total amount of appreciation expected for newly discovered gas reserves. Also, the time period over which appreciation is expected has been lengthened, both in response to the change in reference point and to conform with new evidence of reserve appreciation subsequent to the period previously considered. Data for discoveries made in each of the years 1951 to 1964 inclusive are plotted on the new basis in Figure V-6. A reserve-weighted appreciation curve based on these data is shown as a red line in the figure. The representative appreciation curve tends to level off at a ratio of about 5.0 after approximately ten years, at which time it is assumed that the average gas reserve is fully appreciated. This compares to the ratio of about 2.5 after approximately seven years projected in last year's report. As mentioned previously, this change results primarily from the change to the initial reference point.

As in the case of the appreciation of oil reserves shown in Figure V-3, a second scale has been constructed on the right-hand side of Figure V-6. This scale permits the "normal appreciation factor" to be read directly from the normal appreciation line.

The current gas reserve estimate has been adjusted to reflect the future appreciation indicated by the smoothed curve shown in Figure V-6. The appreciation factors used and the adjusted reserves are presented in Table V-6. Initial gas reserves, now estimated to total almost 43.0 trillion cubic feet, are expected to appreciate by over five trillion cubic feet to some 48.4 trillion cubic feet. Table V-6 also shows the fully appreciated gas reserves per exploratory well on both an annual and cumulative basis. These data are also presented graphically in Figure V-7.

Tables V-5 and V-6 and Figure V-7 show that the gas reserves discovered per exploratory well drilled continued to illustrate as a trend the slow decline discussed in the Board's last report. However, it should be emphasized again that the main purpose of this analysis is to establish a long term trend in the growth of gas reserves, and the data or functions of the data for any particular year or constricted period are of limited significance.

Ultimate Reserves

As in the case of oil, the Board has made several estimates of the ultimate initial established reserves of gas in the Province. It has projected the long term growth rate of 2.5 trillion cubic feet per year on a declining basis over a period of some 30 years and has also projected the cumulative appreciated reserves discovered per exploratory well drilled, on a declining basis, to a total of some 20,000 exploratory wells. Additionally, the Board has made estimates based upon the volume of favourable sediments and average accumulation factors. The Board has also received considerable evidence from industry as to the ultimate gas reserves in the Province. The most recent industry estimates presented to the Board were discussed in detail in Appendix B of OGCB Report 64-11(1). On the basis of the estimates available from industry and its own studies, the Board believes that an ultimate gas reserve estimate for the Province of approximately 100 trillion cubic feet is reasonable.

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(1) Report on the Applications of Trans-Canada Pipe Lines Limited and Alberta and Southern Gas Co. Ltd. under The Gas Resources Preservation Act, 1956. November, 1964.

TABLE V-1

DETAILED STATISTICS OF EXPLORATORY DRILLING AND DISCOVERY OF PROVED RESERVES OF CRUDE OIL IN ALBERTA

YEAR	NUMBER OF EXPLORATORY WELLS DRILLED		MAJOR OIL POOLS DISCOVERED	INITIAL PROVED RESERVES AS OF DECEMBER 31, 1965	
	ANNUAL	CUMULATIVE		ANNUAL MM STBBL	CUMULATIVE MM STBBL
Prior to 1931			Turner Valley Rundle, Wainwright Wainwright, and Two Small Pools	137	137
1931 to 1940			Lloydminster Sparky, and One Small Pool	22	159
1941 to 1946		484(E)	Eight Small Pools	7	166
1947	71	555	Del Bonita Rundle, Leduc-Woodbend D-2 A, Leduc-Woodbend D-3 A	300	466
1948	124	679	Bantry Mannville A, Leduc-Woodbend D-3 B, Redwater D-3, and Three Small Pools	816	1,282
1949	212	891	Excelsior D-2, Golden Spike D-3 A, Joarcam Viking, Stettler D-2 A, Stettler D-3 A, and Five Small Pools	400	1,682
1950	210	1,101	Acheson D-3 A, Duhamel D-3 B, Fenn Big Valley D-2 A, Leduc-Woodbend D-2 B and Eleven Small Pools	377	2,059
1951	346	1,447	Drumheller D-2 A, Duhamel D-2 A, Glen Park D-3 A, New Norway D-2, Wizard Lake D-3 A, and Eighteen Small Pools	294	2,353
1952	442	1,889	Bonnie Glen D-3 A, Clive D-3 A, Malmo D-2, Sturgeon Lake D-3, West Drumheller D-3 A, Westerose D-3, and Twenty Three Small Pools	574	2,927
1953	338	2,227	Erskine D-3, Fairydell-Bon Accord D-3 A, Gilby Viking A, Homeglen-Rimbey D-3, Joffre Viking, Pembina Cardium, Sturgeon Lake South D-3, and Sixteen Small Pools	1,930	4,857
1954	368	2,595	Fenn D-3 F, Garrington Cardium A & B, Pembina Belly River I, Willesden Green Cardium, and Seventeen Small Pools	86	4,943
1955	351	2,946	Harmattan-Elkton Rundle C, Sundre Rundle A, Westward Ho Rundle A, and Eight Small Pools	103	5,046
1956	373	3,319	Bellshill Lake Blairmore, Crossfield Cardium A, Joffre D-2, Leafland Cardium A, Medicine River Jurassic A, St. Albert Big Lake D-3 A Wimborne D-3 A, and Thirteen Small Pools	102	5,148
1957	452	3,771	Harmattan East Rundle, Innisfail D-3, Kaybob Beaverhill Lake A, Swan Hills Beaverhill Lake A & B, Virginia Hills Beaverhill Lake, and Fifteen Small Pools	1,216	6,364

YEAR	NUMBER OF EXPLORATORY WELLS DRILLED		MAJOR OIL POOLS DISCOVERED	INITIAL PROVED RESERVES AS OF DECEMBER 31, 1965	
	ANNUAL	CUMULATIVE		ANNUAL MM STBBL	CUMULATIVE MM STBBL
1958	428	4,199	Cessford Basal Colorado C, Carson Creek North Beaverhill Lake B, Gilby Jurassic B, Hussar Ostracod A, Pembina Keystone Belly River B, Simonette D-3, and Fourteen Small Pools	211	6,575
1959	438	4,637	Carson Creek North Beaverhill Lake A, Judy Creek Beaverhill Lake A, Judy Creek Beaverhill Lake B, Pembina Keystone Belly River C, Swan Hills South Beaverhill Lake A & B, and Twenty Small Pools	924	7,499
1960	412	5,049	Sixteen Small Pools	19	7,518
1961	395	5,444	Fenn West D-2 A, and Twenty-Four Small Pools	28	7,546
1962	433	5,877	Freeman Beaverhill Lake A, Kaybob South Triassic, Medicine River Jurassic C, Medicine River Jurassic D, Snipe Lake Beaverhill Lake, Sylvan Lake Pekisko B, and Twenty-Seven Small Pools	143	7,689
1963	424	6,301	Bantry Mannville C, Cyn-Pem Cardium, Goose River Beaverhill Lake A Taber South Mannville A, Utikuma Lake Granite Wash A, and Forty-Eight Small Pools	85	7,774
1964	581	6,882	Mitsue Gilwood A, and Forty Small Pools	148	7,922
1965	675	7,557	Nipisi Gilwood A, and Twenty-Three Small Pools	179	8,101

(E) Estimated

TABLE V-2

SUMMARY OF STATISTICS OF EXPLORATORY DRILLING AND GROWTH OF CRUDE OIL RESERVES IN ALBERTA

(1) DISCOVERY YEAR	(2) NUMBER OF EXPLORATORY WELLS DRILLED	(3)	(4) INITIAL CRUDE OIL RESERVES AS OF DECEMBER 31, 1965 MILLIONS OF STBBL	(5)	(6) INITIAL CRUDE OIL RESERVES AS OF DECEMBER 31, 1965 PER EXPLORATORY WELL MILLIONS OF STBBL/WELL	(7)
	ANNUAL	CUMULATIVE	ANNUAL	CUMULATIVE	ANNUAL	CUMULATIVE
PRIOR TO 1947		484(E)		166		0.35
1947	71	555	300	466	4.23	0.84
1948	124	679	816	1282	6.58	1.89
1949	212	891	400	1682	1.89	1.89
1950	210	1101	377	2059	1.80	1.87
1951	346	1447	294	2353	0.85	1.63
1952	442	1889	574	2927	1.30	1.55
1953	338	2227	1930	4857	5.71	2.18
1954	368	2595	86	4943	0.23	1.90
1955	351	2946	103	5046	0.29	1.71
1956	373	3319	102	5148	0.27	1.55
1957	452	3771	1216	6364	2.69	1.69
1958	428	4199	211	6575	0.49	1.57
1959	438	4637	924	7499	2.11	1.62
1960	412	5049	19	7518	0.05	1.49
1961	395	5444	28	7546	0.07	1.39
1962	433	5877	143	7689	0.33	1.31
1963	424	6301	85	7774	0.20	1.23
1964	581	6882	148	7922	0.25	1.15
1965	675	7557	179	8101	0.27	1.07

(E) Estimated

TABLE V-3

ANTICIPATED APPRECIATION OF PROVED CRUDE OIL RESERVES AND CORRESPONDING ADJUSTED PROVEN RESERVES PER EXPLORATORY WELL

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
DISCOVERY YEAR	INITIAL PROVED RESERVES AS OF DECEMBER 31, 1965 MILLIONS OF STBBL		PERIOD FROM END OF DISCOVERY YEAR TO DECEMBER 31, 1965 YEARS	NORMAL APPRECIATION FACTOR*	APPRECIATED INITIAL PROVED RESERVES MILLIONS OF STBBL		APPRECIATED INITIAL CRUDE OIL RESERVES PER EXPLORATORY WELL MILLIONS OF STBBL	
	ANNUAL	CUMULATIVE			ANNUAL	CUMULATIVE	ANNUAL	CUMULATIVE
PRIOR TO 1949		1282				1282		
1949	400	1682	16		400	1682	1.89	1.89
1950	377	2059	15	1.00	377	2059	1.80	1.87
1951	294	2353	14	1.01	297	2356	0.86	1.63
1952	574	2927	13	1.02	585	2941	1.32	1.56
1953	1930	4857	12	1.03	1988	4929	5.88	2.21
1954	86	4943	11	1.04	89	5018	0.24	1.93
1955	103	5046	10	1.06	109	5127	0.31	1.74
1956	102	5148	9	1.10	112	5239	0.30	1.58
1957	1216	6364	8	1.15	1398	6637	3.09	1.76
1958	211	6575	7	1.20	253	6890	0.59	1.64
1959	924	7499	6	1.28	1183	8073	2.70	1.74
1960	19	7518	5	1.36	26	8099	0.06	1.60
1961	28	7546	4	1.50	42	8141	0.11	1.50
1962	143	7689	3	1.76	252	8393	0.58	1.43
1963	85	7774	2	2.38	202	8595	0.48	1.36
1964	148	7922	1	4.20	622	9217	1.07	1.34
1965	179	8101	0	11.00	1969	11186	2.92	1.48

*FROM FIGURE V-3

TABLE V-4

DETAILED STATISTICS OF EXPLORATORY DRILLING AND DISCOVERY OF RESERVES OF GAS IN ALBERTA

	NUMBER OF EXPLORATORY WELLS DRILLED			INITIAL MARKETABLE RESERVES AS OF DECEMBER 31, 1965	
YEAR	ANNUAL	CUMULATIVE	MAJOR GAS FIELDS, POOLS AND AREAS DISCOVERED	ANNUAL BCF	CUMULATIVE BCF
Prior to 1931			Bow Island, Brooks, Foremost, Medicine Hat (Medicine Hat, Bow Island), Pouce Coupe (Peace River, Cadomin), Turner Valley (Mississippian Associated), Viking-Kinsella (Viking), and Wainwright.	3,175	3,175
1931 to 1940			Aden (Bow Island, Basal Colorado, Mississippian), Bantry (Milk River, Bow Island, Mannville, Mannville Associated), Lloydminster, Princess, Turner Valley (Mississippian Solution), Wildmere, and Two Small Pools.	691	3,866
1941 To 1945			Athabasca (Grand Rapids), Black Butte (Bow Island, Sunburst-Ellis, Mississippian), Jenner (Blairmore), Jumping Pound, Oyen (Viking), Suffield, and Two Small Pools.	700	4,566
1946		484 (E)	Beaverhill Lake-Fort Saskatchewan (Viking), Lindbergh, Pendant d'Oreille (Bow Island), and Provost.	1,291	5,857
1947	71	555	Bantry (Basal Colorado), Fairydell-Bon Accord, Leduc-Woodbend, Manyberries, Medicine Hat (Ellis), Smith Coulee, and Four Small Pools.	779	6,636
1948	124	679	Morinville, Pincher Creek, Redwater, and Four Small Pools.	718	7,354
1949	212	891	Acheson East, Bolloque Lake, Boyle, Campbell-Namao, Castor, Cessford, Excelsior, Golden Spike, Inland, Joarcam, Lac La Biche, Normandville (Gething), Plain Lake, Rochester, Stettler, Westlock (Viking), Willingdon, and Sixteen Small Pools.	2,162	9,516

TABLE V-4 (Continued)

YEAR	NUMBER OF EXPLORATORY WELLS DRILLED		MAJOR GAS FIELDS, POOLS AND AREAS DISCOVERED	INITIAL MARKETABLE RESERVES AS OF DECEMBER 31, 1965	
	ANNUAL	CUMULATIVE		ANNUAL BCF	CUMULATIVE BCF
1950	210	1,101	Acheson, Countess (Bow Island), Drumheller (Blairmore), Fenn-Big Valley, Jarvie, Leahurst, Rolling Hills (Bow Island), Sibbald (Viking, Basal Colorado), Whitelaw, and Twenty Small Pools.	412	9,928
1951	346	1,447	Atlee-Buffalo (Bow Island), Bashaw (Leduc Associated), Belloy (Gething, Mississippian), Bonnie Glen (Leduc Associated, Leduc Solution), Clive, Countess (Basal Colorado), Etzikom (Bow Island), Figure Lake, Glenevis, Glen Park, Hamelin Creek, Majeau Lake, Millet, Okotoks, Tangent, Three Hills Creek (Belly River), Viking-Kinsella (Blairmore, Devonian), Wizard Lake (Viking, Blairmore, Leduc Solution), and Twenty-two Small Pools.	1,576	11,504
1952	442	1,889	Alix, Bawlf (Viking), Bindloss (Viking), Bittern Lake, Chigwell, Comrey (Bow Island), Dixonville, Eaglesham (Mississippian), Erskine, Gordondale (Paddy), Hackett, Hairy Hill (Viking, Blairmore), Hamilton Lake (Viking), Hercules, Holmberg, Hussar (Blairmore), Malmo, Minnehik-Buck Lake, Nevis, Olds, Phil Can, Rycroft, St. Albert-Big Lake, West Drumheller, Westerose, Wildunn Creek, and Twenty-Nine Small Pools.	3,158	14,662
1953	328	2,227	Atlee-Buffalo (Basal Blairmore), Donalda (Viking, Detrital), Dyberg, Enchant, Eyremore, Flatbush, Gilby (Viking, Jurassic), Gordondale (Gething), Homeglen-Rimbey, Kessler (Viking), Kneller, Parkland North-East, Pembina (Cardium Solution), Pouce Coupe South (Peace River, Triassic), Rich, Samson, Sedalia, Steen River, Sturgeon Lake South (Gething, Leduc), Sturgeon Lake South General Area (Gething, Permo-Penn), Sylvan Lake (Blairmore, Mississippian), Three Hills Creek		

TABLE V-4 (Continued)

YEAR	NUMBER OF EXPLORATORY WELLS DRILLED		MAJOR GAS FIELDS, POOLS AND AREAS DISCOVERED	INITIAL MARKETABLE RESERVES AS OF DECEMBER 31, 1965	
	ANNUAL	CUMULATIVE		ANNUAL BCF	CUMULATIVE BCF
			(Viking, Mississippian), Usona, Waterglen, Wayne-Rosedale (Viking, Blairmore), Westerose South (Leduc), Wood River, and Seventeen Small Pools.	5,152	19,814
1954	368	2,595	Alexander, Bellshill Lake (Viking, Blairmore), Bindloss (Basal Blairmore), Braeburn, Carbon (Viking), Countess (Blairmore), Crossfield (Wabamun), Garrington (Leduc), Ghost Pine (Blairmore), Gilby (Basal Blairmore, Pekisko, Banff, Wabamun), Harmattan-Elkton (Mississippian Associated), Holborne, Hussar (Viking), Medicine River (Blairmore, D-3 Associated), Pembina (Belly River), Saddle Hills (Peace River, Gething), Sarcee, Savanna Creek, Turin (Bow Island, Basal Blairmore), Willesden Green (Cardium Solution), Wimborne (Viking, Leduc), and Fourteen Small Pools.	3,677	23,491
1955	351	2,946	Carbon (Blairmore), Chinook Ridge, Harmattan-Elkton (Mississippian Solution), Hutton (Viking), Knappen, Lone Pine Creek (Wabamun), Pakowki Lake, Red Willow (Viking), Richdale, Rolling Hills (Basal Colorado), Sturgeon Lake South (Triassic), Sundre (Mississippian Associated and Solution), Willesden Green (Cardium Non-Associated), Windfall (Viking, Leduc), and Twenty-One Small Pools.	1,110	24,601

TABLE V-4 (Continued)

YEAR	NUMBER OF EXPLORATORY WELLS DRILLED ANNUAL	CUMULATIVE	MAJOR GAS FIELDS, POOLS AND AREAS DISCOVERED	INITIAL MARKETABLE RESERVES AS OF DECEMBER 31, 1965 ANNUAL BCF	CUMULATIVE BCF
1956	373	3,319	Alderson (Second White Specks), Belloy (Notikewin), Connorsville, Crimson Lake, Crossfield (Mississippian), Eaglesham (Gething, Cadomin), Esther (Victoria), Goodwin Lake, Harmattan East (Mississippian Associated), Hussar (Basal Colorado), Hutton (Basal Mannville), Innisfail (Mississippian, Wabamun), Knopcik, Kirkcaldy (Basal Mannville), Leafland, Mazeppa, Medicine River (Jurassic Solution), Mountain Park, Normandville (Triassic, Mississippian), Obed (Mississippian), Paddle River, Pembina (Viking, Mississippian), Pine Creek (Wabamun), Standard, Steep Creek (Gething, Triassic), Two Creek, Waterton (Mississippian), West Prairie, and Thirty-Four Small Pools.	4,652	29,253
1957	452	3,771	Antelope, Blueridge, Caroline (Blairmore), Carson Creek, Chisholm, Crossfield (Basal Blairmore), Esther (Banff), Faust South, Garrington (Viking, Blairmore), Harmattan East (Mississippian Solution), Harmattan-Elkton (Mississippian Non-Associated), Innisfail (Leduc), Joffre (Viking, Basal Blairmore), Kaybob (Notikewin, Cadomin, Winterburn, Beaverhill Lake), Lambert Creek, Lovett River (Rundle), Pembina (Blairmore, Jurassic), Pine Creek (Leduc), Saddle Hills (Permo-Penn), Stolberg, Swan Hills (Beaverhill Lake Solution), Virginia Hills (Blairmore, Beaverhill Lake Solution, Slave Point), and Twenty-Four Small Pools.	2,285	31,538

TABLE V-4 (Continued)

YEAR	NUMBER OF EXPLORATORY WELLS DRILLED ANNUAL	CUMULATIVE	MAJOR GAS FIELDS, POOLS AND AREAS DISCOVERED	INITIAL MARKETABLE RESERVES AS OF DECEMBER 31, 1965 ANNUAL BCF	CUMULATIVE BCF
1958	428	4,199	Berland River, Berland River West, Boundary Lake South (Mississippian), Bruce (Viking), Carson Creek North, Carstairs (Mississippian), Clear Hills, Fox Creek West (Nisku), Gilby (Jurassic Solution), Greencourt (Jurassic-Detrital), Penhold, Pouce Coupe South (Gething), Prevo (Mississippian), Simonette (Leduc Solution), Steep Creek (Permo-Penn), Waterton (Devonian), Wildcat Hills, Woking, and Twenty-Eight Small Pools.	2,424	33,962
1959	438	4,637	Athabasca North, Bigoray (Mississippian), Bigstone (Dunvegan), Brazeau River, Burnt Timber, Caroline (Mississippian), Fox Creek North (Cadomin), Fox Creek West (Gething), Judy Creek, Lookout Butte, Lovett River (Blairmore), Medicine River (Blairmore Solution, Jurassic Associated and Non-Associated, Mississippian Solution), Retlaw (Bow Island, Basal Blairmore), Simonette (Wabamun), Swan Hills South, Waskahigan, Worsley, and Twenty-Two Small Pools.	1,956	35,918
1960	412	5,049	Bigoray (Blairmore), Bigstone (Gething, Leduc), Black Butte (Basal Colorado), Brown Creek, Crossfield East (Mississippian), Jenner (Bow Island, Basal Colorado), Judy Creek South, Kaybob (Gething), Kaybob South (Viking), Kirkcaldy (Mississippian), Long Coulee, Moose Mountain, Nordegg, Redland (Blairmore), Rowley (Viking, Mississippian), Simonette (Cadomin), Sturgeon Lake (Gething), Sturgeon Lake South General Area (Cadomin), Sylvan Lake (Jurassic Solution, Mississippian Solution), Three Hills (Viking, Blairmore), Wildhorse Creek, Willesden Green (Basal Blairmore), Wilson Creek (Pekisko), Wolf Lake, and Thirty-Five Small Pools.	1,030	36,948

TABLE V-4 (Continued)

YEAR	NUMBER OF EXPLORATORY WELLS DRILLED		MAJOR GAS FIELDS, POOLS AND AREAS DISCOVERED	INITIAL MARKETABLE RESERVES AS OF DECEMBER 31, 1965	
	ANNUAL	CUMULATIVE		ANNUAL BCF	CUMULATIVE BCF
1961	395	5,444	Benjamin Creek, Craigend, Crossfield East (Wabamun), Greencourt (Mississippian Associated), Harmattan-Elkton (Leduc), Jumping Pound West, Kaybob South (Cadomin, Nisku, Beaverhill Lake), Marten Hills (Wabiskaw, Grand Rapids, Wabamun), Pendant d'Oreille (Mannville), Plover Lake, Rowley (Mannville), Sylvan Lake (Leduc Associated), Twining North (Mississippian), Verger (Basal Mannville), Wilson Creek (Banff), Zama Lake, and Twenty Small Pools.	2,434	39,382
1962	433	5,877	Bashaw (Blairmore), Carbon (Mississippian), Edson (Mississippian), Hunter Valley, Kaybob South (Triassic), Strathmore, Sylvan Lake (Jurassic, Leduc Solution), Twining (Mississippian Non-Associated), Virginia Hills (Permian), and Twenty-Three Small Pools.	1,997	41,379
1963	424	6,301	Edson (Gething), Medicine River (Mississippian Associated and Non-Associated), Pine North-West, Swalwell (Mississippian), Taber South, Three Hills Creek (Leduc), and Twenty-Nine Small Pools.	328	41,707
1964	581	6,882	Bigstone (Wabamun), Dorothy, Gold Creek, Kaybob (Spirit River), Lone Pine Creek (Leduc), Marsh Head Creek, Mitsue, Sturgeon Lake South (Cadomin), Tawatinaw (Mannville), and Twenty-Six Small Pools.	847	42,554
1965	675	7,557	Edwand (Nisku), Fox Creek North (Viking), Leafland North (Belly River), Marlboro, Nipisi, Obed (Nisku), Telfordville (Wabamun), Rainbow, and Thirty Small Pools.	402	42,956

(E) ESTIMATED

TABLE V-5

SUMMARY OF STATISTICS OF EXPLORATORY DRILLING AND GROWTH OF GAS RESERVES IN ALBERTA

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	NUMBER OF EXPLORATORY WELLS DRILLED		INITIAL MARKETABLE GAS RESERVES AS OF DECEMBER 31, 1965 BILLIONS OF CUBIC FEET		INITIAL MARKETABLE GAS RESERVE AS OF DECEMBER 31, 1965 PER EXPLORATORY WELL BCF/WELL	
DISCOVERY YEAR	ANNUAL	CUMULATIVE	ANNUAL	CUMULATIVE	ANNUAL	CUMULATIVE
PRIOR TO 1947		484 (E)	5857	5857		
1947	71	555	779	6636	11.0	12.0
1948	124	679	718	7354	5.8	10.8
1949	212	891	2162	9516	10.2	10.7
1950	210	1101	412	9928	2.0	9.0
1951	346	1447	1576	11504	4.6	8.0
1952	442	1889	3158	14662	7.1	7.8
1953	338	2227	5152	19814	15.2	8.9
1954	368	2595	3677	23491	10.0	9.1
1955	351	2946	1110	24601	3.2	8.4
1956	373	3319	4652	29253	12.5	8.8
1957	452	3771	2285	31538	5.1	8.4
1958	428	4199	2424	33962	5.7	8.1
1959	438	4637	1956	35918	4.5	7.7
1960	412	5049	1030	36948	2.5	7.3
1961	395	5444	2434	39382	6.2	7.2
1962	433	5877	1997	41379	4.6	7.0
1963	424	6301	328	41707	0.8	6.6
1964	581	6882	847	42554	1.5	6.2
1965	675	7557	402	42956	0.6	5.7

(E) ESTIMATED

TABLE V-6

ANTICIPATED APPRECIATION OF GAS RESERVES AND CORRESPONDING APPRECIATED RESERVES PER EXPLORATORY WELL

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	INITIAL MARKETABLE GAS RESERVES AS OF DECEMBER 31, 1965 BCF		PERIOD FROM END OF DISCOVERY YEAR TO DECEMBER 31, 1965	NORMAL APPRECIATION FACTOR*	APPRECIATED INITIAL MARKETABLE GAS RESERVES BCF		APPRECIATED INITIAL MARKETABLE GAS RESERVES PER EXPLORATORY WELL BCF/WELL	
DISCOVERY YEAR	ANNUAL	CUMULATIVE	YEARS		ANNUAL	CUMULATIVE	ANNUAL	CUMULATIVE
PRIOR TO 1955		23,491	10+	1.0		23,491		
1955	1,110	24,601	10	1.0	1,110	24,601	3.2	8.4
1956	4,652	29,253	9	1.03	4,792	29,393	12.8	8.9
1957	2,285	31,538	8	1.05	2,399	31,792	5.3	8.4
1958	2,424	33,962	7	1.09	2,642	34,434	6.2	8.2
1959	1,956	35,918	6	1.14	2,230	36,664	5.1	7.9
1960	1,030	36,948	5	1.19	1,226	37,890	3.0	7.5
1961	2,434	39,382	4	1.29	3,140	41,030	7.9	7.5
1962	1,997	41,379	3	1.44	2,876	43,906	6.6	7.5
1963	328	41,707	2	1.70	558	44,464	1.3	7.1
1964	847	42,554	1	2.31	1,957	46,421	3.4	6.7
1965	402	42,956	0	5.0	2,010	48,431	3.0	6.4

* FROM FIGURE V-6

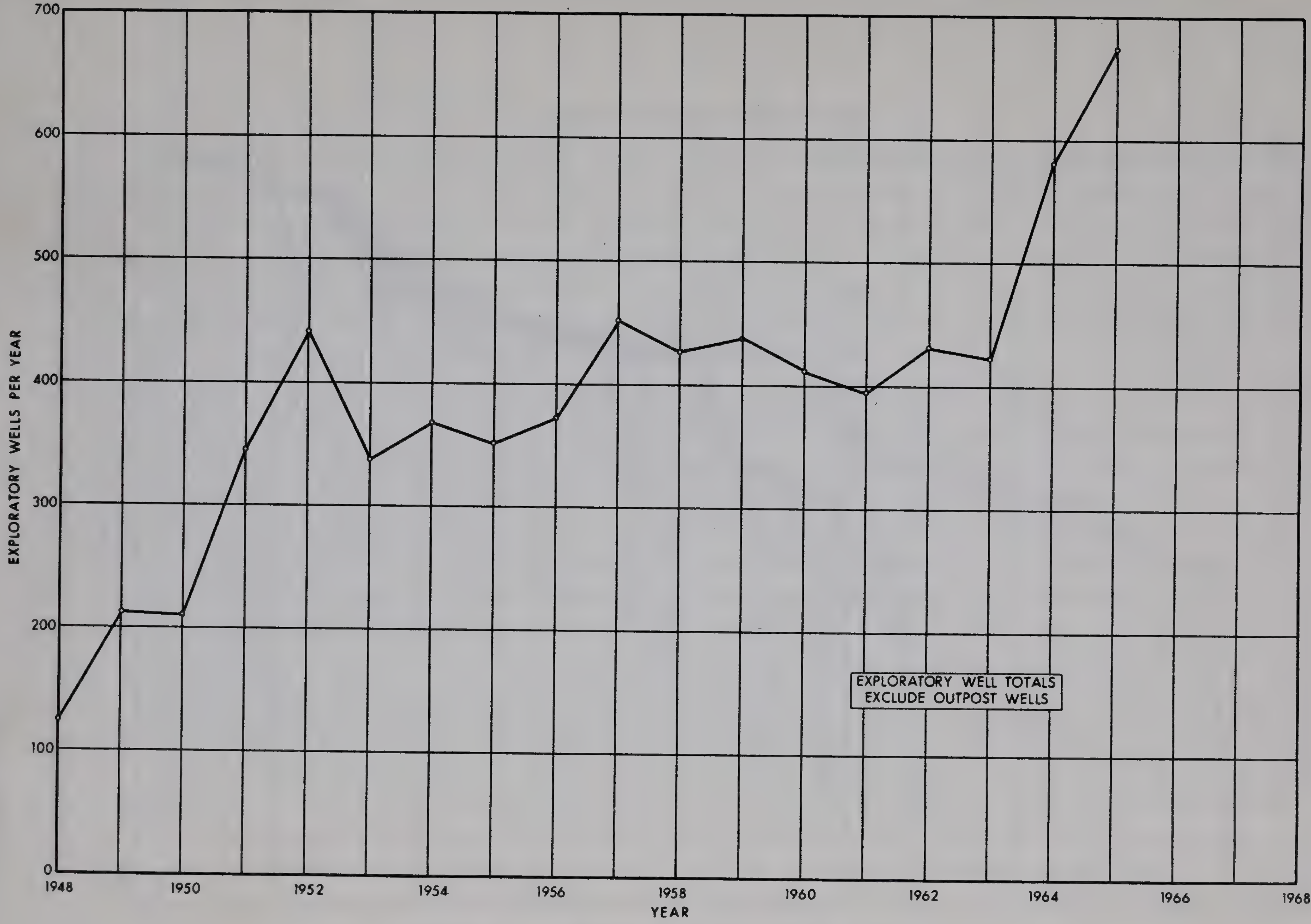
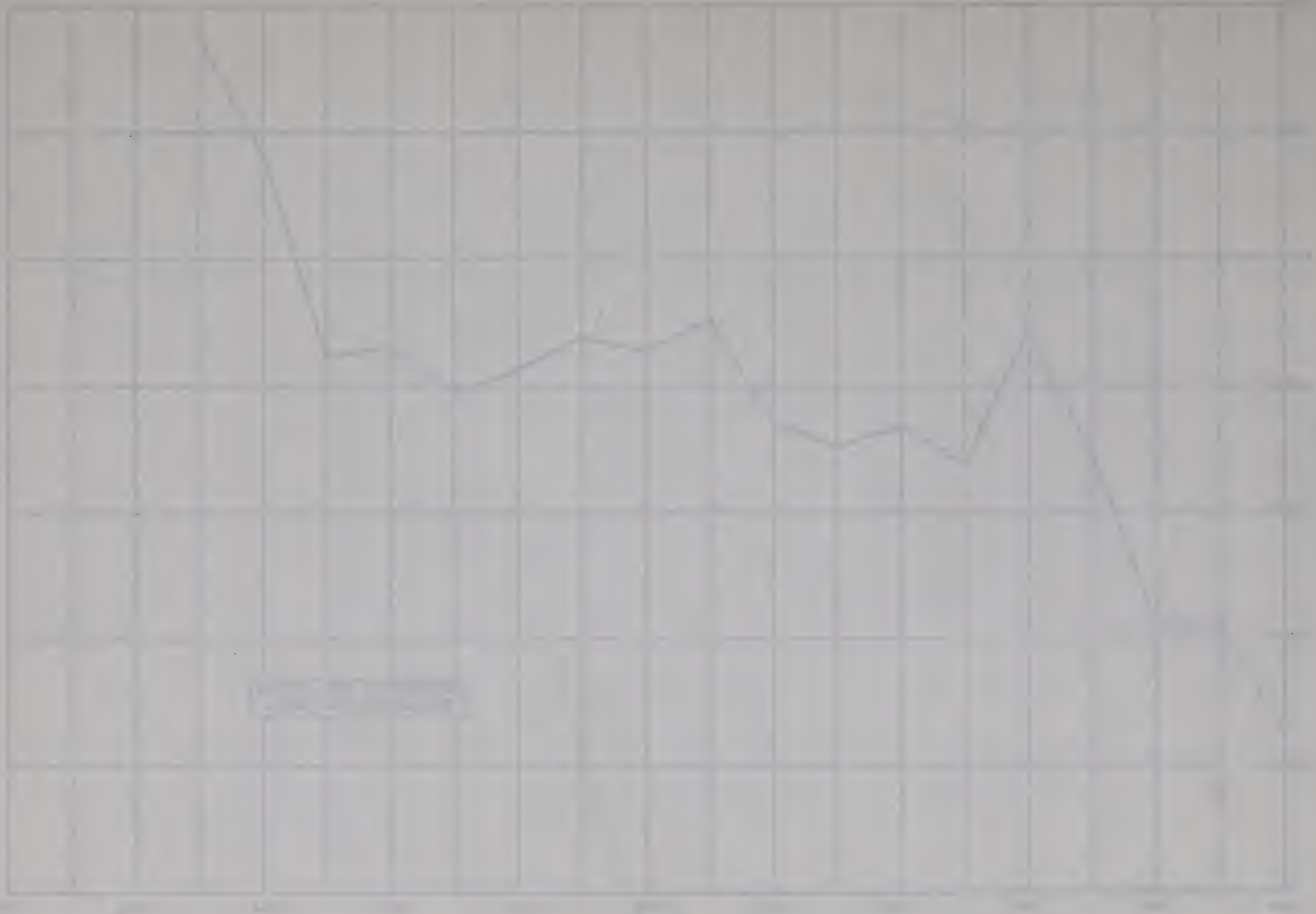


FIGURE V-1 — TRENDS IN EXPLORATORY DRILLING

OIL AND GAS CONSERVATION BOARD
CALGARY, ALBERTA MAY, 1966



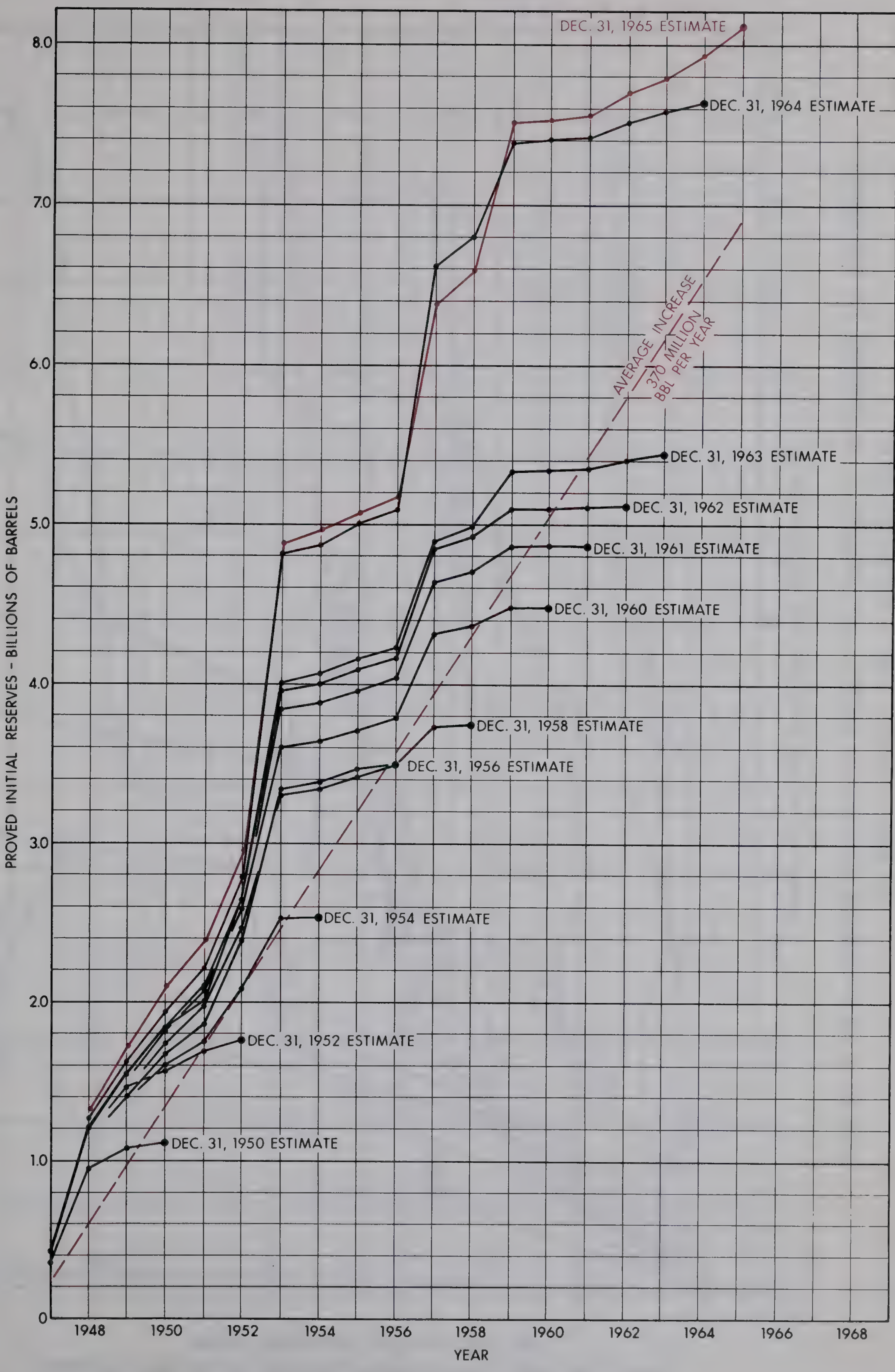


FIGURE V-2 - GROWTH OF PROVED INITIAL CRUDE OIL RESERVES

OIL AND GAS CONSERVATION BOARD
CALGARY ALBERTA MAY, 1966

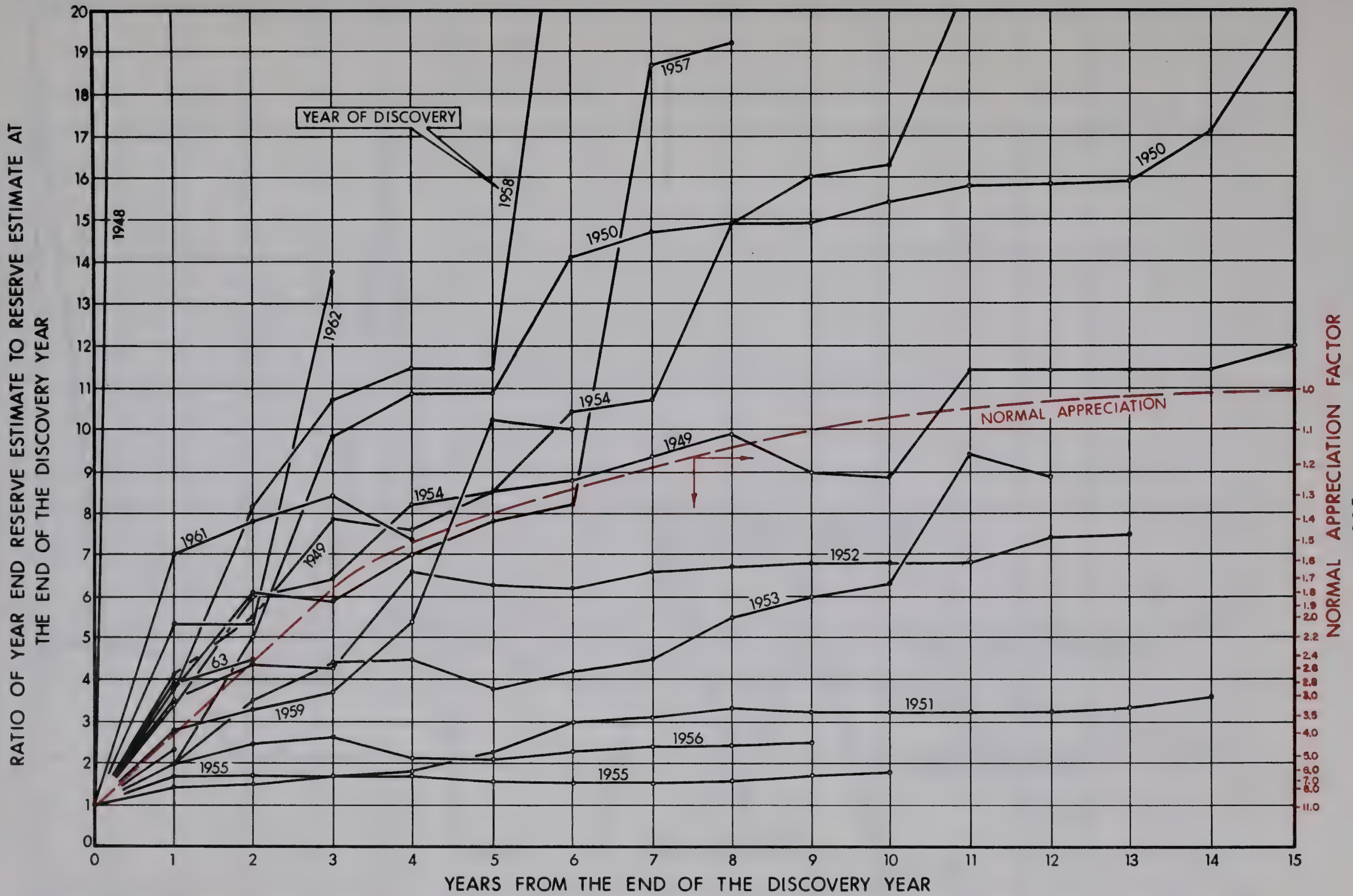


FIGURE V-3 — APPRECIATION OF CRUDE OIL RESERVES REFERRED TO RESERVES AT THE END OF THE DISCOVERY YEAR

OIL AND GAS CONSERVATION BOARD
CALGARY, ALBERTA MAY 1966

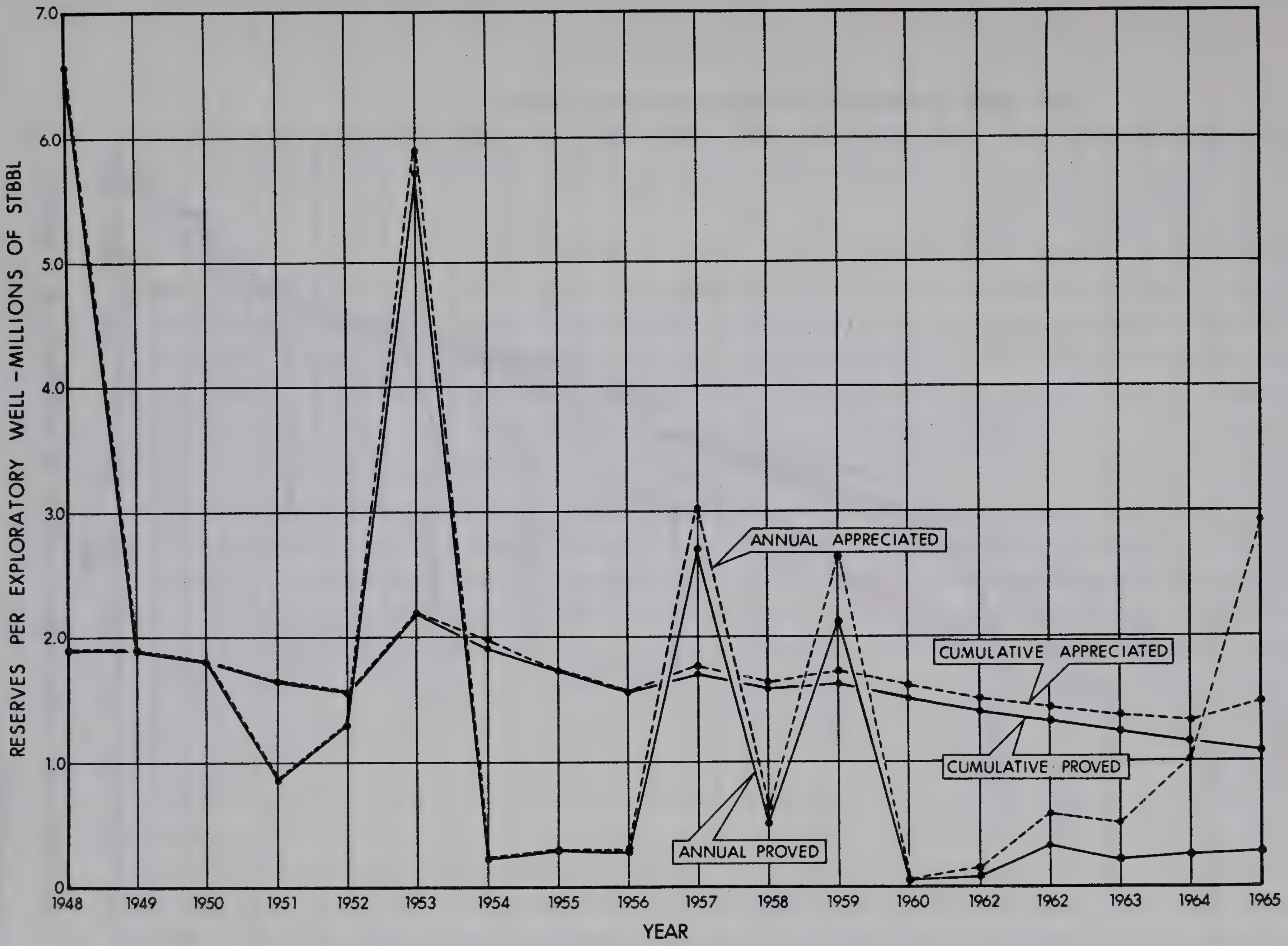
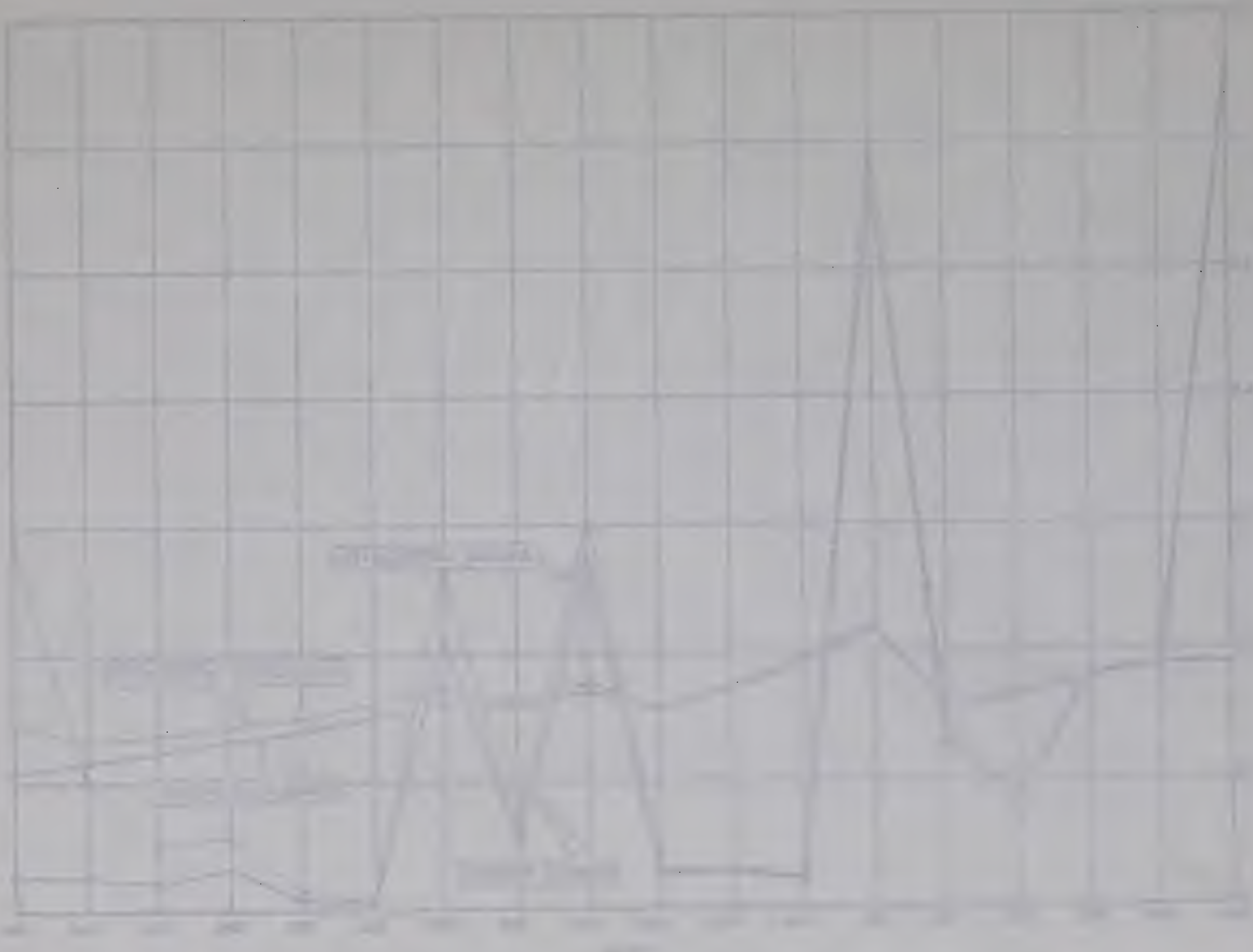


FIGURE V-4 TRENDS IN THE DISCOVERY OF CRUDE OIL RESERVES PER EXPLORATORY WELL

OIL AND GAS CONSERVATION BOARD
CALGARY, ALBERTA MAY, 1966



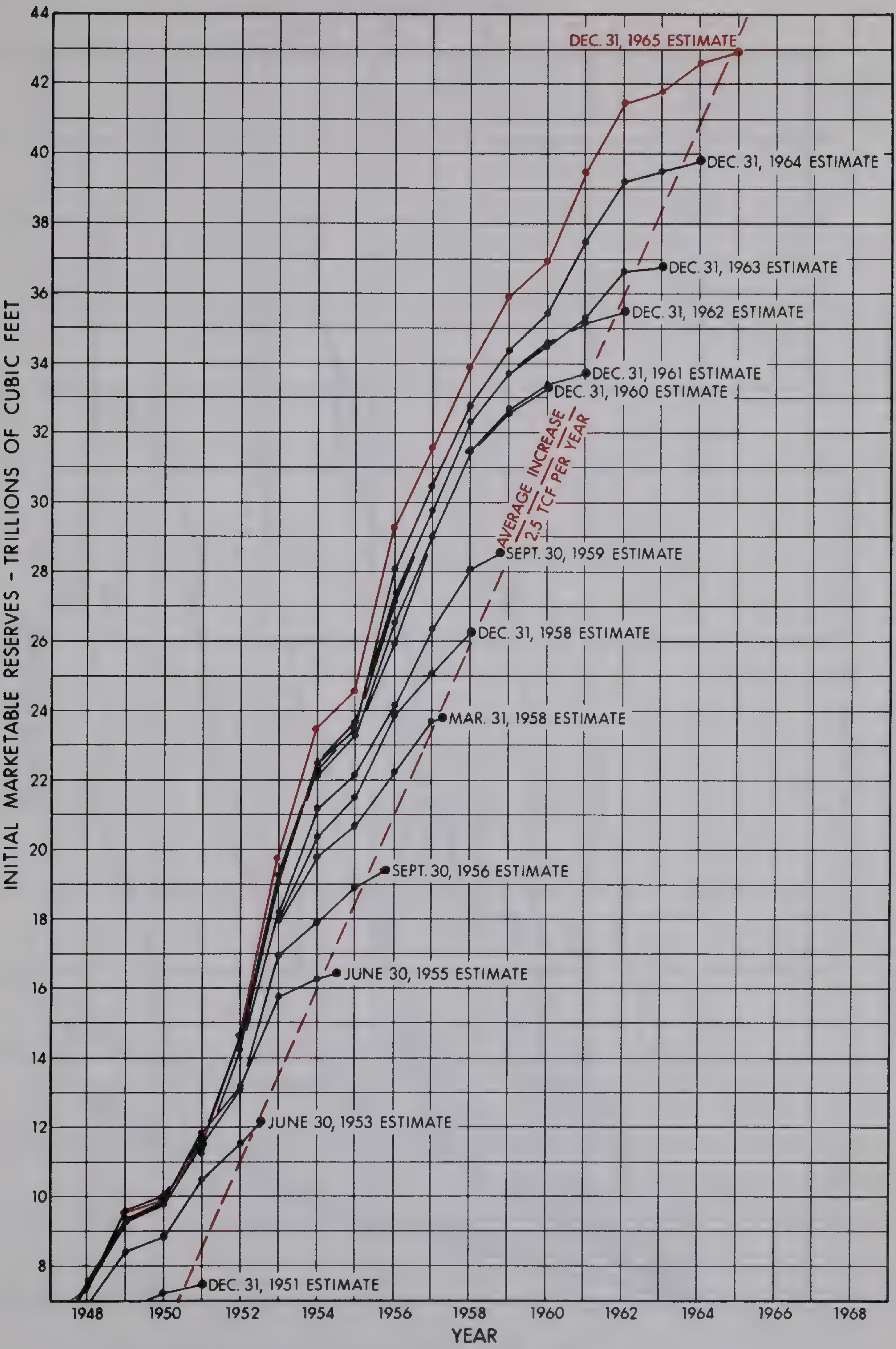


FIGURE V-5 — GROWTH OF INITIAL MARKETABLE GAS RESERVES

OIL AND GAS CONSERVATION BOARD
CALGARY, ALBERTA MAY, 1966

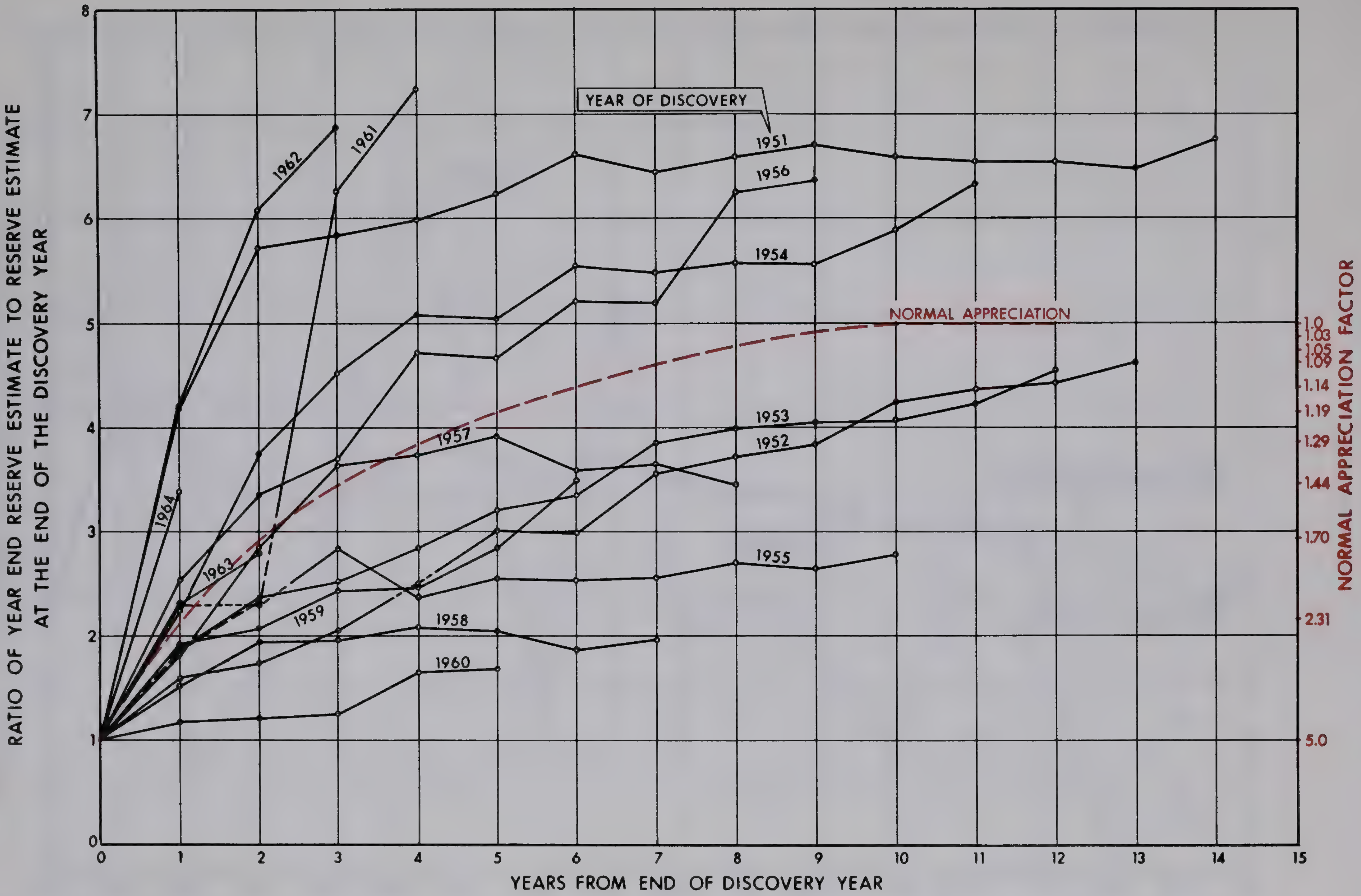


FIGURE V-6 - APPRECIATION OF GAS RESERVES REFERRED TO RESERVES AT THE END OF THE DISCOVERY YEAR

OIL AND GAS CONSERVATION BOARD
CALGARY, ALBERTA MAY, 1966

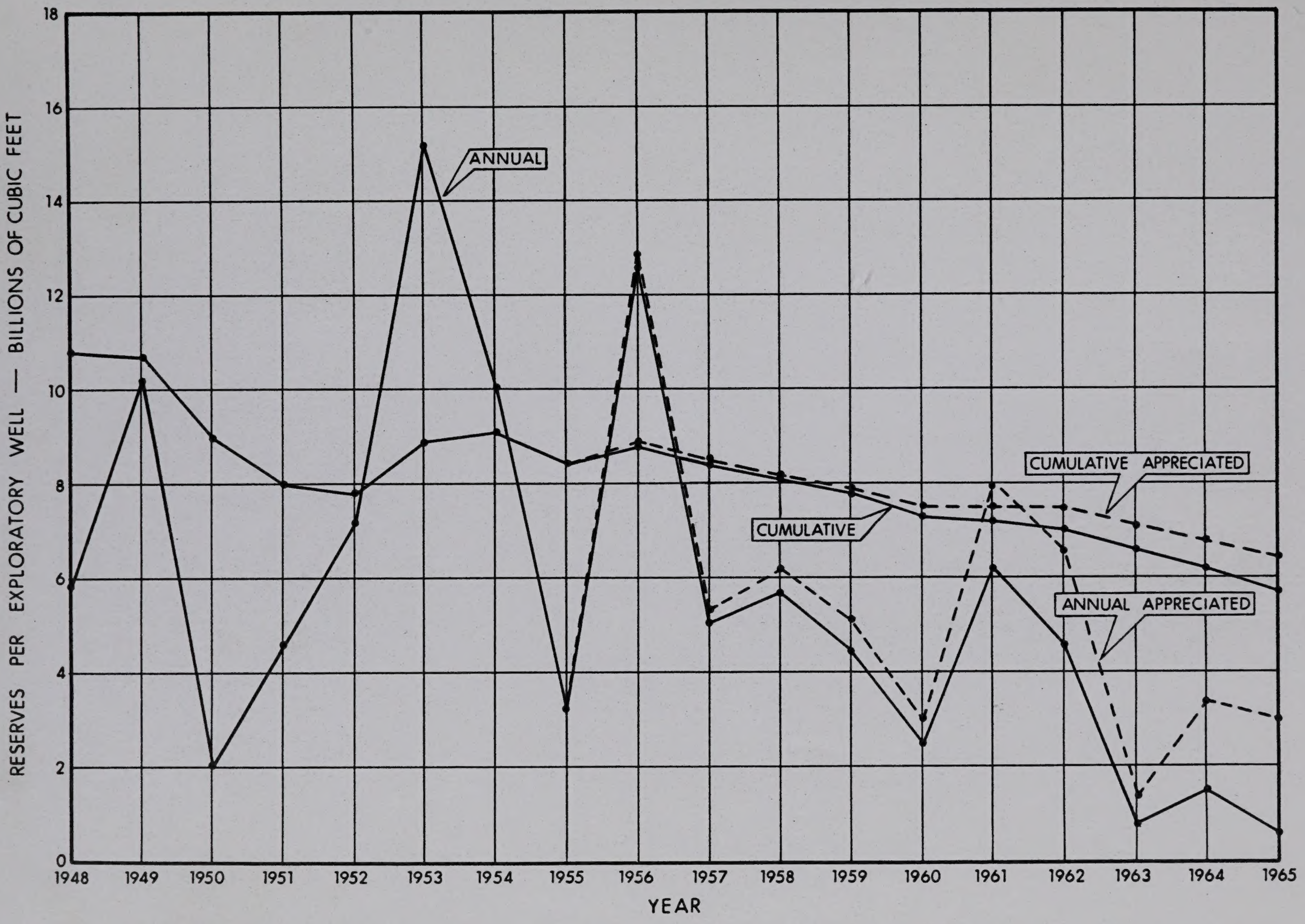


FIGURE V-7 — TRENDS IN THE DISCOVERY OF GAS RESERVES PER EXPLORATORY WELL

OIL AND GAS CONSERVATION BOARD
CALGARY, ALBERTA MAY, 1966